



# PROCEEDINGS

OF THE

## Conference on Agricultural Education held at Pusa

*on 4th and 5th February 1916.*



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THE first meeting was held on Friday, 4th February, when the following members were present :—

The Hon'ble Mr. C. H. A. HILL, C.S.I., C.I.E., I.C.S. (President).

Mr. BERNARD COVENTRY, C.I.E., Agricultural Adviser to the Government of India.

The Hon'ble Mr. J. G. CUMMING, C.I.E., I.C.S., Chief Secretary to the Government of Bengal.

Mr. J. MACKENNA, M.A., I.C.S., Deputy Commissioner, Myaungmya, Burma.

Mr. G. F. KEATINGE, C.I.E., I.C.S., Director of Agriculture, Bombay Presidency.

Mr. S. H. FREMANTLE, C.I.E., I.C.S., Collector, Allahabad.

The Hon'ble Mr. LALUBHAI SAMALDAS, C.I.E., Member, Legislative Council, Bombay.

The Hon'ble Mr. C. F. DE LA FOSSE, M.A., Director of Public Instruction, United Provinces.

Mr. G. ANDERSON, M.A., Junior Assistant Secretary to the Government of India, Department of Education.

Mr. J. H. BARNES, B.Sc., F.I.C., F.C.S., Principal, Agricultural College, Lyallpur.

Mr. G. CLARKE, F.I.C., Agricultural Chemist, United Provinces.

Mr. D. CLOUSTON, M.A., B.Sc., Deputy Director of Agriculture, Central Provinces.

Mr. A. C. DOBBS, Deputy Director of Agriculture, Bihar and Orissa.

Mr. R. W. B. C. WOOD, M.A., Principal, Agricultural College, Coimbatore.

The following is the list of subjects which the Conference was asked to discuss :—

#### AGRICULTURAL COLLEGES.

1. Should the objective of Agricultural Colleges be merely the provision of suitable candidates for service in the Agricultural

Department or should they aim at providing a liberal and scientific education in Agriculture which would be as complete as possible and would attract not only students who aspire to the higher posts in the Agricultural Department, but others who wish to take up higher studies and research work in Agriculture for their own sake?

2. Is it possible to combine both these aims, and if so, would it be an advantage if the Colleges were affiliated to the different Universities?

3. If both aims were combined, is the best method of procedure the combination of a two years' course, intended mainly for candidates for subordinate posts in the Agricultural Department, with a further course of a more scientific character which would lead up to the full diploma or to a B.Sc. degree, the total length of the two courses being about four years?

4. Is it desirable that any instruction in the vernacular should be given at the Agricultural Colleges either in the form of the two years' course referred to in (3) or in that of short vernacular courses outside the ordinary college courses intended for the sons of Zamindars and others farming their own lands?

#### AGRICULTURAL INSTRUCTION FOR AGRICULTURISTS.

1. Should the idea of giving an agricultural tinge to elementary education generally in Primary Schools be definitely abandoned?

2. If so, is it desirable that there should be any general extension of the Bombay system of vernacular agricultural schools both in the Bombay Presidency itself and in other Provinces?

3. Should such schools be controlled entirely by the Agricultural Department or by the Agricultural Department in co-operation with the Education Department? How should the teaching staff for them be recruited?

4. In what ways can the cultivator who is working his own land be educated or continue his education in agriculture? Are demonstration and instruction on the Agricultural Department's

own farms sufficient and are they preferable to vernacular or agricultural courses in connection with the Agricultural Colleges?

In opening the meeting, the President said "I am very glad to welcome you all to an informal conference here on the subject of Agricultural Education. As you perhaps know from the circumstances in which you have been invited to come, the idea of considering generally the best way of organising the development of agricultural teaching has been under consideration for a considerable time, but, for various reasons, partly because there was hardly sufficient experience to go upon, the convening of the conference has been postponed from time to time. Even now, I feel that a good deal of our discussion must prove to be of a fluid character, but, as you will see from the Agenda, we have endeavoured to give our proceedings a concrete shape by tabulating the heads under which we may approach the subject. It is a matter for regret that it should fall to me to preside at so important a discussion inasmuch as I can as yet claim but little experience or knowledge of agriculture on its technical side; and, although I may lay claim to having worked at education for some years, some of you at least may hold that that is as much a drawback as an advantage. In any case, it is a matter for regret that Sir Robert Carlyle, who was for so long associated with agricultural development, should not have been able to occupy this chair to-day.

"The idea originally was to hold a comprehensive agricultural and educational departmental conference. But, rightly or wrongly, it seemed to me that we were hardly ready for that at present, even if it should ultimately be found to be an advantage to supplement our deliberations by a more formal conference at some future date. So far as we had got it seemed that it was first of all desirable to consider and formulate if we could what we want to aim at from the agricultural point of view and to give a general outline of the ideas for attaining our end. Such resolutions as we may come to of this general character can then be sent for consideration by Local Governments with reference to local

conditions, and the Government of India will then be in a position to determine whether it is possible to lay down any general guiding principles for the assistance of the provinces. But, although we are not holding a general agricultural and educational conference, the Education Department have kindly lent us an officer who can, and I hope will, guide us with his advice in matters trenching upon the purely educational aspect of the problem.

"The subject of agricultural education has been the occasion of a very great deal of loose talk and writing, and perhaps, in order to avoid looseness on our own part, we had better start by trying to clarify what we mean to aim at and desire to achieve, and then discuss, in the light of such experience as we have, the best means for attaining our ends. Now, our needs seem to me to be, first and all the time, to improve the agricultural methods of the country, and we must bear that in mind throughout, whatever section of the education question we touch upon. In order to secure the end in view, we must have—

- (a) scientific investigation,
- (b) courses of instruction to fit Indians to help in those investigations,
- (c) instruction in practical agriculture,
- (d) courses of practical and theoretical instruction to fit men to give the instruction in practical agriculture and also to qualify for the subordinate appointments in this agricultural service.

"Finally, we want to have—

- (e) instruction for agriculturists.

"Our colleges have been established for, and aim at, meeting the requirements of (a), (b), (c), and (d). They do so in various ways and I think it is all to the good that uniformity was in 1913 done away with, though sufficient time has not yet elapsed to give us the results of the decision then come to. I have had a statement\* prepared showing in parallel columns the different methods pursued in the six different collegiate institutions, and it will be seen that, while

\* Appendix I.

they all more or less follow the system of the Armstrong, Cirencester, and the South-Eastern Agricultural Colleges, and other institutions in England they do not follow a precisely similar scheme. Speaking generally, they all provide (a) a long course, varying from three and a half to four years, leading up to a form of B Sc, whether diploma or university degree, and (b) shorter courses varying in length but usually of two years, for instruction in practical agriculture and training of teachers to give that instruction. In some of the institutions an attempt is also made to teach a vernacular course corresponding more or less to the practical course for farmers arranged for in some of the English institutions. I must note here that there is one feature prevalent in England which is generally absent in India and that is short courses for school teachers from non-agricultural institutions. The qualifications for admittance to the (a) full course, above referred to, varies, but is usually either the school final or the matriculation, while, for the shorter course (b), it is sometimes nominally the vernacular final or some other equivalent test.

"Now, there are several things which we want to get clear in our minds not with a view necessarily to uniformity but in order to be sure whither our policy tends. For example, it is quite possible that it may be preferable in Madras to proceed on different lines to those laid down for, say, the United Provinces, but we should know definitely what we are aiming at whether in the United Provinces or in Madras, and should be quite certain that it is the general improvement of the agricultural methods of the country. Some of the points in regard to which there has been an absence of clear thinking and uncertainty of purpose, not only in India but elsewhere, are—

- (1) should our full college courses be frankly limited to providing for departmental needs or should they aim at a liberal and scientific education in agriculture as complete as we can make it?
- (2) is it possible to combine both the above aims?
- (3) if we try to do both, should our colleges be affiliated to the different universities?



(4) is it or is it not desirable to combine, say, a two years' course for departmental subordinates with a further two years' course for the B.Sc. degree, or full diploma?

(5) is it or is it not time to recognise that it is impossible to combine vernacular courses with college courses? The decision under this head need not, of course, prejudice periodical demonstrations in the vernacular to farmers.

"As regards the first four of these questions opinion is somewhat sharply divided but, I think, largely owing to a misconception. I must again revert to what our main objective is in India, namely, to make Indian agricultural methods more efficient, and that implies the employment ultimately of more and more Indians for the purpose. Efficiency in our Agricultural Department itself is not *per se* the only aim in view. Government can look after that in various ways; but a very much larger issue is involved which I want you to keep in view during our discussions, namely, the discharge of our responsibility to endeavour to teach all we know to our Indian fellow-subjects with a view to their becoming capable of carrying on investigations and research, and of effecting improvements in practical agriculture on their own account; in fact, of placing Indians and India on the same footing as English farmers and English professors in their relations to one another in England. Efficiency, however great, within the Department itself, valuable as such efficiency is, will not alone achieve the desired end.

"I now turn to the question of vernacular education and the instruction of agriculturists. As regards the first point, including as it does the question whether primary education should be given an agricultural tinge, in other words, whether 'nature study' should be resorted to, I believe it is now the general view that such a step is neither necessary nor desirable, as a general rule. I believe I am correct in saying, I know I am correct so far as the Bombay Presidency is concerned, that the vernacular text-

books are, so far as it has been found possible, based on the idea that illustrations and so forth must have reference to the daily life of the scholars and to their agricultural surroundings and that, in fact, 'nature study' to a certain extent forms the basis of the teaching imparted in the primary and rural schools. But, subject to what Mr. Anderson may have to tell us, I am emphatically of opinion that we, the Agricultural Department, should now definitely cease to look to the Education Department and the Education Department's schools as a factor for furthering instruction in agriculture, properly so called; and I think it is possible, subject to what may be suggested by the discussion that may ensue, that it may be useful for us to pronounce definitely to this effect. The vernacular primary schools are designed to give a general grounding in the three R's with a view to fitting the scholars to cope with the circumstances in which their life is thrown, but are not, and could not be, designed to turn out agriculturists. A point that is frequently overlooked is that vast numbers of the scholars in our rural and primary schools are not agriculturists at all. We, the Agricultural Department, therefore, recognising this, are thrown back on the consideration of how best we can further the knowledge of better agricultural methods among those who are agriculturists and on whom such teaching will not be thrown away. Hitherto, there has been great diversity of practice in this matter. A certain amount of demonstration work is done, both in the colleges and on the demonstration farms, for the benefit of agriculturists, and such efforts have unquestionably had good results in impressing on agriculturists the advantages of more careful tilling and of better selection of seeds. I believe the impression made in the Central Provinces in particular is a very definite one and that we may hope that there, as well as in other provinces, important results are beginning to be shown. But such demonstrations are not strictly in the nature of agricultural education, that is to say, they do not purport, or attempt, to train up agriculturists from an early age or to do more than exhibit the practical results which ensue from certain improved methods. So far as I know, the only direct, educational effort, properly

so-called, which has been made in this matter is that initiated in the Bombay Presidency in their vernacular agricultural schools, of which the most important is that at Loni, the operations in which will no doubt be explained to us by Mr. Keatinge, where, side by side with the continuance of a vernacular education, conducted by a member of the Educational Department, the boys are taught, for a considerable period every day on land set aside for the purpose, the meaning of improved methods. As I have said, so far as I know, this is the only attempt that has been made in India to teach agriculture directly to boys of school-going age, and we shall be glad to learn from the Director of Agriculture, Bombay, his impressions as to the utility of the experiment.

"Elsewhere, the tendency has been rather to institute vernacular agricultural courses in connection with the agricultural colleges. Now, in regard to this matter, the impression I have derived from what I have seen certainly seems to favour the conclusion that such an attempt is incompatible with the objects with which agricultural colleges have been founded and is unlikely to produce directly beneficial results on a scale at all commensurate with the cost. For example, at the Cawnpore College, there is a large vernacular class designed to instruct the sons of zamindars of the better class. That object in itself is a laudable one but I venture to think that it will be agreed that it does not, or is not likely to, conform in the most effective possible way to the main objective which I ventured to set before you, namely, the general improvement of the methods of agriculture in India. I do not mean to say that in isolated cases the boys who have gone through the course at Cawnpore may not be instrumental in introducing improvements here and there, but what I mean to say is that it is not a measure which should be generally adopted as being likely to tend to the propagation at large of a better understanding of the need for more careful cultivation if better agricultural results are to be attained in this country.

"I have read with interest the paper contributed by Mr. Coventry to the Science Conference at Lucknow—a paper which, perhaps he will forgive me for suggesting, might with some

advantage have been submitted for discussion here rather than there. However, the paper is fortunately available to us and will be of great use in our discussions.

“Mr. Coventry has been greatly impressed by the very instructive reports of the General Education Board in America and has deduced the conclusion that we ought to follow in the Board’s footsteps. Put quite briefly, the situation to be faced by the Board, which, it is relevant to note, was formed to carry out the purposes of a private charity, was the necessity, if there was to be a general improvement in the educational level of the farmers, especially of the southern agricultural States, to enable them to afford higher education by improving their material well-being—in other words, to increase their prosperity by demonstrating the advantages and profits to be derived from more careful methods, the use of selected seed, etc. The Board therefore commenced its operations by sending forth teachers and demonstrators, practical men, whose duty was to induce farmers, by the force of example and demonstrated results, to improve their tilling. The advantages were speedily apparent and there is now not only an enormous number of such experimental stations, with their outcrop of dairy associations and so forth, but the profits of agriculture have been considerably enhanced and the well-being of the farmer materially improved—with the result that he is better able than before to provide for the education of his sons.

“Now, to argue from this to India, we must pre-suppose similar conditions and we should have to ask ourselves: first, does the farmer’s son fail to prosecute his studies to a higher standard because of his father’s inability to pay the fees—or from some other cause? And, secondly, is it the case that if and when a member of the Indian agricultural community is able to prosecute his higher studies, either he or his parent desires to devote the knowledge gained to the benefit of agricultural methods or to divert it into some other channel?

“I do not want to dogmatise on either question; but I have not myself known a single case of a member of the agricultural

class in India, desiring his son to prosecute his studies into the higher branches, who was prevented from doing so on account of the expense. What with special scholarships for agriculturists and other inducements to this class there are usually available resources for helping on any young cultivator with such an ambition. On the other hand, I have known many young agriculturists so helped on to higher studies—out of whom I can only recall one, at this moment, who did not look to Government service, and a final farewell to his field work, as the goal of his labours. Moreover, his father would abet him in this ambition.

“I venture to think, therefore, that excellent as we hope results may be in the improvement of agricultural methods, from the extension of our demonstration efforts, we shall do well, in our deliberations at this Conference, to bear in mind the actual facts of Indian society and its constitution when discussing the foundation upon which we hope to build up our system of agricultural education.

“I trust that the Agricultural Adviser will not consider that these comments are meant as destructive criticism of his proposals. Far from that being the case, I recognise the great value of his paper and that we must carefully consider the work of the General Education Board and whether we cannot profit by its proceedings. All I am concerned for, in these very brief remarks, is to urge that we should examine closely the pros and cons of any scheme, and should, so far as we can, test foreign experience in the light of local Indian conditions.

“If I may in conclusion outline the ideal which, it seems to me, we ought to aim at, it is this. At one end of the scale we should try to capture the agriculturist himself, and, by demonstration, indicate to him where and how he can improve his out-turn; at the same time, if possible, impressing upon his sons, when they have received their ordinary vernacular education and are competent to understand, the elementary reasons why certain results follow certain causes. These sons will then develop, not only into successful, but into intelligently successful, farmers.

They will understand the meaning and need of scientific research in agriculture; and *their* sons in turn may some of them choose to prosecute such research themselves, in the interests of the agriculture of India. This brings us to the other end of the scale. It is essential for Indian agriculture that we should provide institutions capable of training Indian students in the highest plane of agricultural scientific research, as well as to staff the higher administrative branches of the Agricultural Department. Our aim must be all the time to fit Indians for the carrying on of the work at present concentrated in the narrow confines of the Imperial Agricultural Service. For such purpose—and in course of time we may hope, as I have hinted, that Indians not only of the literary casts but of the agricultural also will take up this line—colleges affiliated to the various Indian Universities seem to me to be essential. It may be that there is not room for many such university colleges yet; but they will have to come.”

### *Agricultural Colleges (1).*

The President then suggested that the Conference should discuss the subjects in the order in which they stood in the Agenda. With regard to the first of these :—

“Should the objective of the Agricultural Colleges be merely the provision of suitable candidates for service in the Agricultural Department or should they aim at providing a liberal and scientific education in agriculture which would be as complete as possible and would attract not only students who aspire to the higher posts in the Agricultural Department, but others who wish to take up higher studies and research work in agriculture for their own sake ?”

he said it was really a question of the gradual aiming at the University standard and asked Mr. Clarke for his views on the subject.

Mr. Clarke said that the present position of the Agricultural Colleges in Upper India could be traced to the fact that too many colleges were opened, all attempting the same thing, *e.g.*, to offer a scientific training in connection with agriculture of a University type.

An examination of the evidence available on the subject led to the conclusion that there was a small demand in Upper India for this type of education among certain classes, but it was not sufficient to maintain an expensive type of college in each province.

The founders of the Agricultural Colleges under Lord Curzon's scheme had very ill-defined ideas of the function of an Agricultural College and department. They had no experience to work on. They did not know as we know now that several types of education and work must be included in a complete scheme of agricultural development. They undoubtedly devoted too much time and thought to the development of higher education in connection with agriculture to the detriment of other lines of work such for example as crop improvement. Now, however, the pendulum was swinging in the other direction and there was a danger of this side being wholly overlooked. It was a small but integral part of any continuous scheme of agricultural development. The mistake made was that all the colleges started on one type of work. The result had been that none in Upper India have been really a success not because there was no demand at all for this type of education but because the demand was too small for so many colleges. Some had lowered their standard and others had had to readjust themselves in various ways to keep their doors open. One central college of university standard would have succeeded.

Mr. Clarke said that it would be a matter of great regret to him personally to see the attempt to give the highest type of scientific education in connection with agriculture abandoned altogether, but a case could not be made out for four colleges of so expensive a type in Upper India.

No one province alone could raise sufficient numbers for a course of university standard, but in every province there was a small demand, amongst those who seek collegiate education, for this type of training in connection with agriculture.

A very important point also was that a university college was an absolute necessity if selected Indian candidates had to be trained in India for the higher administrative branches of the agricultural service.

Mr. Clarke's proposals were :—

- I. To develop one of the colleges in Upper India for work of university standard for students and candidates for the agricultural service from Bengal, Bihar, the Punjab, United Provinces and Central Provinces.
- II. To affiliate it to the local university and to create a strong faculty of agriculture, thus ensuring that the education will be carried out on sound lines.

Mr. Clarke had frequently stated his opinion that the development of the agricultural department was intimately connected with the question of securing for a proportion of the higher posts in the agricultural department Indians of scientific and administrative capacity.

At the present time the only course open to any who might seek a training for this work was to join one of the British or American colleges. It would be much better if the training were available in India, and this was a very strong argument for one college of university standard.

There was no reason why a training should not be made available in India, equal in every respect to that to be found in America or Great Britain. A really first class college staffed with the best men the department could give and enthusiasts in the cause of education, was a *sine qua non*.

There existed in the United Provinces, a class of yeoman proprietors who for generations had been associated with the management of land and small estates.



The importance of this class had been alluded to by the Lieutenant-Governor of the United Provinces in some of his recent remarks on the subject of agricultural education. It seemed a matter of importance that educational facilities should be offered to at least some of these, fitting them to take their natural places as leaders of rural society and pioneers in the work of agricultural improvement.

It might be that the hope of getting youths of this class was an impracticable ideal. Mr. Clarke did not believe it was. The number would be small at first but it would increase. Already a few had joined the 4 years' diploma course at Cawnpur since the re-organization of the Agricultural College. The Government High Schools attracted them and a number sought admission to the Arts Colleges.

This class existed, and a certain proportion sought collegiate education. The question at once presented itself why did not the latter come to the Agricultural College and the answer to that was, because the college had no educational status in the province, such as, connection with the university would confer. It was not even regarded by the public as existing for educational purposes at all.

True collegiate education centering round agriculture was what this class needed, not mere manual training, as so many think, and stuffing with odds and ends of so-called useful information.

The type of education offered in the Arts Colleges did not always give them what they most needed and what would be of most value to them. The spirit of scientific enquiry did not exist in India but it had to be created if any material progress was to be made in agricultural improvement. A mere handful of European experts, however devoted and self-sacrificing they might be, could not make a lasting impression unaided. The scientific attitude of mind must be roused in the people themselves.

A very good chance existed if rightly handled, of providing a type of education at an Agricultural College which would do

much to arouse scientific enquiry amongst a class—not always under the necessity of working for a livelihood—who certainly had it in their power to exert great influence in the work of agricultural improvement.

To achieve this Mr. Clarke would give them education with agriculture—not merely agricultural education.

The education offered might bear much the same relation to agriculture as that given by the Faculty of Technology of Manchester University did to the industries of Lancashire.

He did not think much would be achieved without the creation of a Faculty of Agriculture in a university and the affiliation of an agricultural college to the university. All kinds of arguments had been advanced against affiliation generally, centering round the fear of university interference. Mr. Clarke thought that many of the arguments did not exhibit a very high purpose. If the universities were bad, make them better. A guarantee that the education would be carried out on sound lines could surely be obtained by constituting a strong Faculty of Agriculture.

Such was the policy Mr. Clarke would keep in view with regard to the future development of higher education in connection with agriculture, but he did not mean that this was the only class of education required for a complete scheme of agricultural development, it was a small but important one.

Progress would be slow at first, as far as numbers are concerned, and Government only was able to decide if few students and a high standard were more desirable than numbers and a low one.

There would undoubtedly be criticism of the cost, per student, of working such a policy in the first years. This must be faced. This type of education was expensive and could not, in any case, be reduced per unit, by increase in numbers, as was often done in Arts Colleges. Large numbers of students could not be handled with success in training of this type. It would be comparatively costly for some years but not more costly,

Mr. Clarke ventured to suggest, than the failures of the past had turned out to be.

The President then called on the Hon'ble Mr. Lalubhai Samaldas who said he thought opinion in India was almost unanimous that the object of an Agricultural College should be not merely to provide candidates for the Agricultural Department. The aim should be, as the President had put it, 'as high as possible'. Students should not have to go to England or America for higher education in agriculture. He agreed with Mr. Clarke that there should be an Agricultural Faculty to give a status, without which students would not attend an Agricultural College. In Bombay, after affiliation, very good students had been obtained, of whom some had been employed in the Department on research work. This showed that the spirit of scientific research was not absent—at least in Bombay. The education given at Poona was more effective than it used to be and students were now able to apply it.

At this point Mr. Fremantle raised the question why it had been decided not to affiliate Agricultural Colleges generally. Mr. de la Fosse said that the suggestion of affiliating the Cawnpur College to the Allahabad University had been considered very carefully some years ago, by Government and the Agricultural Department; but it was not actually referred to the University. He understood the objections to affiliation then raised were to the control of the subjects and courses for the degree by scientists in the University,—not being experts in agriculture,—who would tend to press the claims of their own subjects at the expense of the general training of the students. On the other hand the men who went to the Cawnpur College, who were largely men in training for subordinate service in the Revenue and Agricultural Departments were not of a type who would aspire to or benefit by a degree. Mr. de la Fosse was of opinion that the fear that the University would insist on subjects that were not absolutely essential, up to that standard, for agriculturists, was really the deterrent. As a matter of fact, before a degree in Agriculture could be given it would be necessary to establish a Faculty of

Agriculture—a separate body to look after courses and examinations in that particular line of work, and Mr. de la Fosso explained in detail how the Medical Department which originally entertained similar fears with regard to the addition of scientists on the Medical Faculty of the University, had found that they had not themselves the knowledge to enable them to prescribe standards, and had as a result placed one or two scientists on the Faculty. He thought the doctors, who completely dominated the Faculty, would now be the first to object to any attempt to remove the outside members—who bring to the Faculty a knowledge which they themselves do not possess.

Mr. Fremantle understood that the objection was that students would take the expensive agricultural course and make no use of it afterwards.

Mr. Barnes endorsed all that Mr. Clarke had said. Two years ago they had failed to recruit students at Lyallpur. He had then formulated the idea that the education was too expensive and that they should concentrate on a better college of a higher type. He explained how the difficulty had been solved by making the three years' course into one of four years', but giving all the agricultural tuition required for entrance into the Agricultural Department in the first 2 years. The Punjab Government had agreed to admit students after 2 years' tuition, into the lower ranks of the Department, but if they wished to rise to the higher offices they would have to take their diploma by taking the remaining two years at the College later on. More students of a better class were now coming to the College. As regards affiliation, he had discussed the matter with the Director of Public Instruction and the Vice-Chancellor and Registrar of the Punjab University whom he found unanimously favourable towards the affiliation of the Agricultural College. They would be glad to see some premium put on practical science in the University teaching. Of the students sent to England for training in technology, Mr. Barnes thought none of those from the Punjab had yet applied what they had learnt; there was some hope that in the case of agriculture they might be able to do so and he fully agreed with

Mr. Clarke that we required an institute of the very highest type. The Punjab University authorities had said that should the Lyallpur College ever be affiliated it would be granted an independent Faculty on exactly similar lines with the Medical Faculty.

As regards the vernacular class at Lyallpur, which was a popular one no students from the class had ever applied for employment in the Department whereas the ordinary College student came purely and simply in order to get employment.

Mr. Anderson said that as one who had been on the Senate of a University for some time he thought it was of great practical value to have on the Senate a number of experts closely in touch with land problems which, after all, were closely connected with education. He was more doubtful as to the benefit to the Agricultural Colleges. Poona College had undoubtedly benefited by affiliation, which had attracted a better type of student, though he thought a mistake had been made in insisting on the first year's course in the Arts Colleges. Other Agricultural Colleges appeared to be in the experimental stage.

Difficulties might arise with the University Senate as regards little details affecting the whole course of an Agricultural College, and as regards making changes in rules once passed by the Senate. Mr. Anderson thought we should try to keep apart the departmental side of agricultural work and 'liberal education', and it would probably be very unwise for the departmental side to be influenced at all by the University. He was sure the University would not agree to postpone giving a degree until students had undergone a practical course after the completion of their theoretical course. It might be possible to affiliate the educational side and keep the departmental side separate as is done to a certain extent in the Medical and Engineering Colleges. As regards the question whether such Colleges should give a liberal and scientific education, Mr. Anderson said there had been some doubt in the past even in the Arts Colleges as to the competence of the students to benefit from a liberal form of instruction, in history or economics

or even in English literature and so forth. He thought this was due to some very glaring defects in the system, and the Arts Colleges were beginning to think of the system rather more, and of the subjects and incapacity of the students rather less. They had tried to give this liberal form of education too early—immediately after Matriculation, and he thought the Agricultural Colleges had perhaps made the same mistake. The Bombay University had now tried a two years' general preparatory course, after Matriculation, and he thought there was a promise of greater success as a result. With regard to the difficulty of getting the better class of students to go back to agricultural work he did not think that the Poona College attracted the best of the students who had attended an Arts College for one year, as was required of them. He thought the Agricultural Colleges were too departmentalized in that they did not give facilities for such a liberal education as the students wanted. By this he meant a sound general course of two years with a strong practical bent followed by a liberal and scientific training in agriculture. If the Colleges were still further departmentalized he thought still less satisfactory students would be forthcoming.

Mr. Barnes agreed with Mr. Anderson—at Lyallpur the great difficulty had been that they had not attracted as good a class of students as they might have attracted. The students were not as a rule sufficiently well grounded for a good technical education. An attempt was made to remedy this after they came to Lyallpur where courses were given in both English and Arithmetic which were not subjects for teaching at an Agricultural College.

This led to a general discussion of Mr. Anderson's proposal, during which he explained that the general course, which he had suggested, should be given at the Agricultural Colleges to *fit matriculated students for more advanced agricultural education*,—should have a strong agricultural flavour, and should include the teaching of English, Mathematics, a second language, and elementary science. At the Arts Colleges *the teaching of English related chiefly to English literature*.

Mr. Keatinge did not think that the year spent at an Arts College diverted the better students from the intention—formed he believed before they went to the Arts College—of going on to the Agricultural College. At Poona they aimed at giving the better class of boys a liberal education in agriculture and general science. The students consisted of three or four classes. The sons of men closely connected with land, by inheritance and otherwise, formed very promising material. Retired Government officials who had purchased land and wished their sons to have a good general education that would fit them for independent work, if they did not take to Government service—these sent a very good class of boys to the College. Then there were clever boys of the cultivating classes who came to the top at school and came on to the Agricultural College; these usually wanted Government service. The best of the boys who took up agriculture on their own account were of the professional classes. The fact that many of the boys of the cultivating classes did not wish to return to their villages was not against an education such as was given at Poona, because the amount and kind of land at the disposal of such a boy was not usually such that he could make it his business to cultivate it. As in America, passed students wanted irrigated land where they could practise intensive cultivation of a high order. Mr. Keatinge did not think it necessary to expect all students to take up cultivation. They received a very general education—a liberal education in itself—and many joined the higher branches of the Revenue Department where, owing to their agricultural bias, they had done good work for the Department and for agriculture.

As regards affiliation, it had worked successfully at Poona. The University had been very good in accepting proposals, but he agreed that it was very desirable that a College should have its syllabus in what would be practically its permanent and final shape before attempting affiliation. In Bombay they had succeeded in getting sufficient students of the classes he had mentioned. Without affiliation he thought many of the students who now come to the College would not have come. Certainly the

professional class would not send their sons to a College which aimed at being merely a technical college for fitting people for subordinate work in the Revenue and Agricultural Departments. Some of the best members of the Department came from this class and had done very good work. Mr. Keatinge thought the number of students tended to increase, in spite of the fact that they had to pass the Arts Second Previous Examination before coming to the College.

Questioned as to his opinion of Mr. Anderson's proposal Mr. Keatinge agreed that in the majority of instances boys should have a general training before they tackled scientific problems. But he would like it given in an Arts College, he did not think an Agricultural College should have the business of teaching English—of which boys of the *Matriculate standard* had not usually a good knowledge. He admitted that at present boys acquired a lot of useless knowledge, but he thought this was the fault of the Arts College, which he should have thought would consider it desirable to give students a knowledge of English quite apart from English literature. He deprecated giving them an agricultural course from the beginning.

The President intervened at this stage to point out that the discussion had brought out the existence of the hiatus, to which he had referred in his opening remarks, between the vernacular agricultural schools at one end and at the other end a College possible of affiliation to the University. Assuming that a Province were to be in a position to have five or six agricultural vernacular schools leading up approximately to the vernacular final with the last three years or four years associated with agriculture, what was to be done with those more brilliant students from these schools who might want to go on to the higher education? If they went to the ordinary high schools and followed an Arts course for a year after Matriculation they would quite probably not revert to agricultural training. The President suggested that the difficulties indicated by several members of the Conference might be solved by establishing a high school of an agricultural type in which the more brilliant products of



the vernacular agricultural schools could be concentrated. They would have their general education side by side with a special agricultural education and that general education, being in the hands of the Agricultural Department, could give far more importance to the learning of English. Reverting to the general discussion the President asked Mr. Coventry for his views.

As regards affiliation Mr. Coventry said he thought it was really a question of ways and means. He agreed that if a scheme of the kind advocated by Mr. Clarke were to be carried through and established it would be quite sound. But was the Agricultural Department in a position to undertake this advanced education—which was part of the general scheme of education—or should the Education Department undertake it? Mr. Coventry laid stress on the magnitude of the task before the Agricultural Department—of agricultural development directed towards raising the standard of living of the people quite apart from education. He thought the primary work of the Department was economic development; there had been a great set-back in research and experiment owing to the organisation of the Agricultural Colleges, which had not been included in the original scheme. There would probably be no harm in retaining this educational aspect, provided Government were prepared to make good this set-back, but the question was one in which educationists should certainly co-operate—or there would have to be a double set of men engaged, one for teaching and the other for research.

Pressed on the point of the interference of educational work with development since 1906, Mr. Coventry instanced the diversion of specialists from research to teaching, without which they would have got far more and better results. Mr. Clarke agreed with Mr. Coventry that one man could not run a research institution and teach in the college. There was too much to do at present. He would have one college on university lines with a special staff of educational enthusiasts under the Agricultural Department, but separate from the Agricultural staff.

In reply to a question from the President as to whether he would reduce the number or the status of the other colleges he said he would develop them mainly on the lines of research institutes.

Mr. Wood, speaking from the point of view of Madras, was of opinion that the first objective of the Coimbatore College must for many years to come be the provision of men for appointment in the Agricultural Department. There was no sufficiently large and well-proved body of knowledge to form the basis of a better course in Madras agriculture than was being taught at present. They were still very largely in the experimental stage, the course was liable to change, and they were not ready for affiliation. Another objection was the difficulty of arranging for an equable representation at the college of the four languages in Madras, if an Entrance examination were prescribed. He was definitely of opinion (1) that at present the Coimbatore College should devote itself to the training of the men required to work in the department ; (2) that even if there were a demand for agricultural education it could not in itself lead to changes in the courses because the courses were the best that could at present be given, and (3) that affiliation was not at present desirable.

Mr. Olouston, who had not been present at the whole of the discussion, agreed with Mr. Wood, the course at Nagpur had already been changed twice, and the present courses, which were the same as those in Madras, were under trial.

The President here explained his view already expressed in his opening remarks that the question was not whether the Coimbatore or any other college should be affiliated, but whether, in the abstract, it was desirable for the furtherance of agricultural education, that colleges in which the circumstances were suitable should recognise the advantage of liberalising their education through affiliation to a University,—thus affording facilities for the highest possible agricultural education with the stamp of the University upon it. It was not a concrete question. Whatever resolution were come to at the conference would bind

nobody, but if they could come to a uniform opinion and report to the Governments concerned on the abstract issue, individual cases would be determined with reference to the particular circumstances. He wished to correct the impression that if a resolution in favour of affiliation were passed it would immediately be carried into general effect.

Mr. Clouston, continuing, said that in the Central Provinces they did not favour affiliation because they looked on Agriculture as a highly technical subject. All the men trained would for many years to come be required for Government service, mostly in the Agricultural Department, and the whole course drawn up by the members of that Department was, they believed, the best possible training. On the other hand it was not the best course with a view to affiliation because a student working for a University degree could not afford to spend two years almost entirely on practical work which would not be necessary for a degree.

The President here pointed out that this would be a matter for the Faculty of Agriculture, and referred to the case mentioned by Mr. de la Fosse, illustrating how the University, in constituting a Faculty so as to represent in the highest degree possible the needs of the particular subject, may subordinate its own aims to those of the experts. \*

Continuing, Mr. Clouston mentioned that some students from Nagpur had gone to Pusa, and four had taken degrees in America.

The President, in summing up the discussion, said the second question in the agenda fell in with the first. Was it desirable that education in Agricultural Colleges should be made as complete as possible and that there should be affiliation with the Universities? And was it possible to combine the aim of supplying departmental needs with the aim of providing a liberal and scientific education, in the same institutions?

This reference had resolved itself quite readily into a consideration of the proposition indicated by Mr. Clarke in the first

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\* The subject was discussed again in connection with the third of the terms of reference.

instance. Roughly, while emphatically in favour of liberalising the scientific education in Agriculture as far as possible, Mr. Clarke thought that the demand in India was at present limited, and therefore it was impossible to justify four colleges in Upper India and staff them properly for the purpose of getting them into the University. The Conference, accepting this summary of the situation, was in a position to consider the abstract question of the general desirability of affording, throughout India, facilities for the highest education in agriculture without committing itself on the question whether every individual college should be so taken out of the category of departmental institutions. To that extent Mr. Clarke's proposition covered the ground and would facilitate a general consensus of opinion on the reference.

Adverting to cardinal points in the discussion, the President recalled the Hon'ble Mr Lalubhai's presentation of the opinion of Indians who had given some thought to the subject. That view, the prevalence of which the President confirmed from his own knowledge, was that it was most desirable, in order to encourage an interest in Agriculture and to give it its proper place in the thoughts and feelings of the educated Indian, to bring it to notice by instituting degrees in Agriculture, and giving the highest possible training in the subject.

Educational opinion in the Conference was, the President gathered, definitely in favour of the association of an agricultural degree with university activities, and he understood the criticisms coming from that side to be very largely those incidental to the attitude of the Agricultural Department in the past in reference to its association with education. The President instanced Mr. de la Fosse's view that the Agricultural Department was not desirous of affiliation—which accounted for the question having been pursued in one Province only. Mr. Anderson had indicated the probability that with affiliation there would be slight friction and occasional delays in the compilation of curricula of the Agricultural Colleges. This was incidental to any complete organisation representing two interests; with the

general educational interests on one side and the Agricultural Department's interests perhaps not altogether in sympathy, on the other side, there must be delays in getting the one interest to give way to the other. But the President did not anticipate that the difficulties or delays would be serious. As Mr. Keatinge had pointed out, the Bombay University,—not always a very amenable body,—had, in the past at all events, deferred to their agricultural advisers in the matter of the agricultural college curricula submitted through the Faculty of Agriculture. The difficulties formed no serious objection to the general principle. Mr. Barnes had entirely agreed with Mr. Clarke's view that if the requisite staff and the requisite demand—as indicated by Mr. Coventry—could be got, it was desirable not only to cater for the Department's need but also to teach as high as possible in the science of agriculture.

With regard to the question of ways and means, the President thought Mr. Coventry had undoubtedly put his finger on the crucial spot in reference to the question whether affiliation would become a practical policy. The university demanded certain standards of any college applying to be affiliated, and might be trusted not to grant affiliation unless the college staff came up to its requirements. But would this improve the College from the Agricultural Department's point of view? Could the time and further assistance to enable a college to teach up to that standard be spared by the Agricultural Department? The President agreed that this was a difficulty, but did not entirely agree with Mr. Coventry as to the relative importance of the two aspects—the Departmental requirements and the country's needs on the score of education. As he had said in his opening remarks, the President ventured to think the Department had in the past taken a somewhat narrow view of its responsibilities in that respect. That narrow view was the direct outcome of the most laudable desire to secure the greatest possible efficiency. The Department had ensured efficiency in a high degree and if this had involved perhaps the setting aside up till now of the raising of the question of the general liberalisation of agricultural

education, that was, he thought, merely incidental to a new activity and need not be deplored. But he did think that now when Indians were very much more, and on a very much wider scale, beginning to think for themselves, and expressed a definite if tentative desire for the liberalisation of the institutions teaching agriculture, then a view wider than a purely departmental view should be taken of the standard of education.

He thought on that side all had not been done. Otherwise he agreed that before affiliation for any individual college could be considered it must be quite certain of its position, and the Department must make the Government of India realise that it could not have affiliation if it meant definitely trenching on the efficiency of the Department's activities in connection with the improvement of agriculture and agricultural research. The establishment must be sufficient to enable justice to be done to both aspects. The President went on to say that he did not interpret into the trend of the discussion any hostility to the abstract idea of aiming at affiliation in the case of those colleges in which there was a demand for affiliation on the score of liberalisation of education, and where the staff could be shown to be adequate to cope with both sides of the college activities. He thought nearly all the speakers were agreed in regard to that, and that even Mr. Wood had no hostility to the question of affiliation as an abstract proposition. Under these circumstances he thought the conference should reply to this question in such a way as to indicate agreement in the abstract proposition that affiliation is desirable in the interest both of the colleges themselves and of the department, provided that the staff requirements are met and affiliation will not result in the sacrifice of the efficiency of the departmental side of the college's interests. He suggested drafting a resolution on these lines and invited further discussion.

Mr. Barnes said the question of economy should not be lost sight of. One of the most important points brought out by Mr. Clarke had been the necessity for economy—which could be achieved by having one institution affiliated for several provinces. This should be brought out,

The President agreed, he proposed to indicate by way of illustration the possibility of one college for Upper India, leaving the others as departmental institutions.

This led to some discussion as to whether each of the provinces would not wish to train its own men. Mr. Clarke explained that he only contemplated training for the higher posts at the Central College; there were certainly not enough students to keep all the colleges open.

The President admitted the difficulty of drawing a line but thought it was hardly necessary to discuss the point raised—each college would do what it was now doing and one college would give a special course.

At this point the Conference adjourned for an interval after which the following Resolution was agreed to without further discussion :—

#### *Agricultural Colleges (1).*

“The Conference considered that this question could not be answered absolutely. While as an absolute proposition they were in favour of providing in colleges under the Agricultural Department, a liberal and scientific education which should be as complete as possible, they were not convinced that in the case of all the provincial colleges this was a practicable ideal or one which local conditions rendered desirable. For example, there were not enough students in any of the four colleges of Upper India to justify, in any individual case, the provision of training of the type intended. On the other hand, it is in the opinion of the Conference, desirable that Upper India should have one college at which the education should not be restricted to the training of men for departmental requirements,—provided that the necessary staff and equipment can be made available for such college without prejudicing the normal development of the general work of the Agricultural Department.”

Resolution I.

*Agricultural Colleges (2).*

At the President's suggestion the Conference agreed to record that the answer to the second question in the agenda was implied in the resolution recorded with regard to the first—the two having in fact been considered together.

*Agricultural Colleges (3).*

The President then read the third reference.

"If both aims were combined, is the best method of procedure the combination of a two years' course, intended mainly for candidates for subordinate posts in the Agricultural Department, with a further course of a more scientific character which would lead up to the full diploma or to a B.Sc. degree, the total length of the two courses being about four years?"

The point had not actually been discussed, and in view of the first resolution he did not know whether it was necessary for the Conference to pronounce on it. He invited opinions.

A lengthy general discussion followed, during which it emerged that in most provinces a special two years' course consisting mainly of practical agriculture was required to train men for the upper subordinate appointments in the Department—quite apart from a demand, on behalf of men who knew little or no English, for a practical course which might occupy a year or less and would qualify them for lower subordinate appointments in the Department or for working their own land.

The discussion turned mainly on the question whether this special training, which by general agreement would occupy two years, could be recognised by a University as a part of a degree course, or whether as an alternative suggested by the President, a syllabus could be devised which, while carrying men during the first two years a recognised stage nearer the University degree, would at the end of that period turn out men useful to the Department. There was a consensus of opinion on the educational side that the University would



require a certain standard of general education at an intermediate stage in the college education of a student proceeding to a degree, and that an examination test corresponding to the Intermediate Examination in Arts and Science would be insisted on. Even the medical preliminary, quoted as an instance of special treatment of a technical subject, connoted a considerable knowledge of science on the part of a medical student—who also had practical tests. On the other hand, from the point of view of the Agricultural Department, though it was suggested that a man who had had no scientific training was sometimes the better man for field work, it was admitted that at least for higher subordinate appointments in the Department, men who had had two years' general scientific education, such as would carry them up to the University Intermediate standard would prove useful recruits. Such men would have to undergo one or even two years' practical training and probation which could be recognised as coming in the course of their employment in the Department.

In the course of the discussion Mr. Barnes pointed out that in the new course now being tried at Agricultural Colleges, the last two years almost corresponded to the Intermediate University course, and agreed with the President as to the necessity from the Department's point of view of a full University course in addition to the preliminary stage represented by the first two years of the new Agricultural College course.

Mr. Cumming suggested that if men could take the Intermediate in Science on their way to an agricultural degree it would avoid what appeared to be an unnecessary duplication of classes.

Mr. Wood expressed a decided preference for a complete special two years' course such as the first two years now given at Coimbatore over two years of University education followed by two years' practical training.

The President, taking the point of view of an Agricultural College the status of which had been raised by affiliation to a

University, thought that such a college should not be debarred from training ambitious students from other provinces in which the colleges were not affiliated. He was anxious not to eliminate the possibility of giving practical instruction other than for subordinate appointments, but to recognise, for the purposes of the Department, a stage towards the degree as remedying the deficiency of men competent for employment in the Department. He was for devising a syllabus which could turn out useful men in the first two years. He summed up the discussion as indicating that there was nothing incompatible with a course of training such as might be laid down, in communication with the University, for aspirants to the Agricultural degree,—in their being able to attain to a standard short of a degree which would qualify them for employment in the Agricultural Department. They would not necessarily have a claim but would have attained to a standard which might render them more useful.

A Resolution drafted on these lines was ultimately agreed to in the following form:—

*Agricultural Colleges (3).*

“It should be possible to arrange that students who are taking a four years’ course leading to a degree should be able to qualify by an intermediate examination for employment on probation in the lower ranks of the Agricultural Department, —confirmation to depend on the passing of a test in practical farm work on the conclusion of the probationary period.”

Resolution II.

*Agricultural Colleges (4).*

The President then read the fourth reference:—

“Is it desirable that any instruction in the vernacular should be given at the Agricultural Colleges either in the form of the two years’ course referred to in (3) or in that of short vernacular courses outside the ordinary college courses intended for the sons of zamindars and others farming their own lands?”

The President explained the reason for this reference. At Cawnpore zamindars' sons went to the college for two years and then went back to their homes; such a vernacular course in conjunction with a college seemed to be calculated to take up a very considerable amount of the time of the higher staff of the college, and not to be the best—certainly not the cheapest—way of obtaining the desired end.

Mr. Fremantle, who said it was not out of the question that such men should obtain employment in the Agricultural Department, thought a mistake had been made in prescribing the vernacular final examination as a qualification for entry instead of the 8th class of the old English middle.

Mr. Wood said that in Madras they were prepared to give a vernacular course when the time arrived, but at present they had neither the men to spare nor sufficient knowledge accumulated for teaching.

The four vernaculars in Madras would make it particularly difficult to give a vernacular course at the Coimbatore College.

Mr. Clouston said the *malguzar's* class at the college at Nagpur had proved a failure and had been replaced by short courses on the farm.

At Lyallpur Mr. Barnes said the vernacular course was in the nature of a farmer's class.

It was agreed that a vernacular course was a low type of education for a college; it had been tried experimentally at Cawnpore, where it had attracted a class of men who had been failures at school and did not want to work, but who liked, and could afford, the expense of a collegiate life. Mr. Clarke would have no compunction in dropping the course altogether.

A resolution was accordingly agreed to in the following terms:—

*Agricultural Colleges (4).*

"A vernacular course should not be made a department of the college work but there is no objection to the giving of courses of instruction in practical agriculture on the college

Resolution III.

farm or other farms of the Department without relation to the work of the college."

*Agricultural instruction for agriculturists (1).*

The Conference then proceeded to discuss the references under the second head in the agenda "Agricultural Instruction for Agriculturists."

After reading the first reference under this head, "Should the idea of giving an agricultural tinge to elementary education generally in primary schools be definitely abandoned?" The President referring to his opening remarks, said the point really was how far, if at all, could the Education Department be looked to to adapt its teaching to agriculture?

As a matter of fact, as he had said, in some Provinces the actual text-books supplied by the Education Department had been given an agricultural tinge, in the sense that the text was illustrated with reference to objects of common interest in the surrounding country. But the real question underlying the reference was whether, as was commonly supposed, it is impossible to alter entirely the colour and method of the Education Department, on the ground that the general population ought to be taught farming and agriculture in its schools. This idea seemed to the President entirely unpractical and to require discussion. He asked Mr. Fremantle to give the Conference his views, with reference to his book on Rural Education.

Mr. Fremantle said his chief point was the fitting in of the times and seasons of schools to rural needs, which had certainly not been done in the United Provinces yet. Thus in two districts adjoining Allahabad, Mirzapur and Benares, the annual vacation was in June; there were only two short holidays of 10 days each in the spring and autumn harvests. He advocated the half-time system in this connection.

On this system school boys would not all be actually employed in agriculture for half the day, but they would not be in school all day and would be going about with their parents

who are agriculturists, and they would not feel that school was a place quite apart from home.

At present a boy studied for two or three years, learnt nothing of value and at a very early age, when he became of some use in the fields, was taken away by his parents. He thought that if from the beginning boys attended school for half the day, their parents might agree to let them go for half the day after they had begun to be useful to them.

He had introduced the system into the lower classes of schools in the Allahabad district, but in the Upper Primary standard he had not been able to introduce the system universally because they could not get through the course in half the day.

Another question was that of text-books—which were not always in consonance with rural needs. It should be possible, for instance, to bring out an “Arithmetic” which had relation to the facts of the village—which had not been done yet.

Then as regards nature-study. This was optional in schools in the United Provinces, and Mr. Fremantle had stopped it altogether in Allahabad because the teachers could not teach it. He thought, with diffidence, that by proper instruction and some introduction to agricultural science in normal schools and training classes, it might be possible to give the teacher some scientific training, which he did not get at present.

He thought also that each normal school and training class should have a demonstration farm attached to it. Similarly, it might be possible to get zamindars to start demonstration farms at or near primary schools.

Referring again to the half-time system, Mr. Fremantle mentioned as an incidental advantage from the educational point of view that it required less space in the school and fewer teachers.

In other ways, such as encouraging tree-planting in school compounds and the establishment of school gardens, he thought the Education Department might do more; what had been done had not been very systematic and had so far had no great result.

Mr. de la Fosse entirely agreed with Mr. Fremantle in the matter of school holidays. It might be suggested to the Education Department that school vacations and holidays should be fixed so as to fit in with the agricultural seasons as far as possible—in the case of village primary schools. In the case of middle schools—formerly called town schools—this would probably not be possible, because it was necessary for the term in these schools to correspond with that in the Anglo-vernacular schools to which students went on.

As regards the question of half-time. Some years ago a half-time course had been arranged for in vernacular schools in the United Provinces, and it had actually been laid down in the Education Code that Primary Schools should teach three hours a day; the idea being that boys could assist their parents in farm work during the remainder of the day. In practice the measure has broken down, because the children who attended school were as a matter of fact those not of agricultural workers but of fairly well-to-do agriculturists and of *banias*. The unpopularity of the measure had made it a dead letter.

In Allahabad district he thought the half-time system had now really been introduced, but this was probably due to the powerful personal influence of Mr. Fremantle and an unusually strong staff of supervising officers: it would be an unpopular measure to prescribe for all classes of schools in the districts.

From the Education Department's-point of view there would be no objection. They entirely agreed that the course laid down should be covered in three hours, but, whether because parents sent their children to school to get them out of the way or not, the people were unwilling to accept this excellent scheme.

Mr. de la Fosse, however, deprecated the idea that children who had perhaps walked some miles to school, and back after three or four hours in school, should work in the fields, the half-time system if desirable was so for its own sake and not to enable parents to make use of the services of their children.

As regards the differentiation of curricula in rural and town schools, an endeavour to do this had, he believed, been made in the



would then be less tendency to break off to the town or to aim at Government service.

Questioned as to the use of such farms, Mr. de la Fosse said the boys should do plot cultivation so as to bring them into touch with plant life directly, with the object of improving their education and becoming more useful citizens—it would help to give them an impetus towards country life and to keep them near the land.

Mr. Clouston said a six months' training class on the Nagpur Farm, for normal students, had been tried in the Central Provinces. It had been given up because the Education Department came to the conclusion that it was absolutely no good. The attempt to teach elementary agriculture and school gardening had failed.

It was absurd to expect a boy who could hardly read what he had written to acquire any scientific knowledge worthy of the name in two or three years. An attempt to teach science, unless the teachers were trained in method, was absolutely useless. He did not think it was possible to give children an agricultural bent by any nature teaching that could possibly be given.

Mr. Anderson agreed with Mr. de la Fosse as to the impossibility of giving an agricultural tinge in school curricula. In the matter of school organisation, however, he not only thought a great improvement might result from an attempt to adopt some of Mr. Fremantle's suggestions as regards school holidays, but he was not altogether clear that the half-time system had been tried sufficiently. He quoted from the last Quinquennial Review of the Progress of Education in India to show that the explanations of failure given there, were opposed to those given by Mr. de la Fosse. He thought the idea of imparting an agricultural tinge to school organisation had not been given a full trial, and suggested that it might be a good thing to give more power to local bodies to decide such matters for themselves.

As regards methods of school teaching, he agreed with Mr. de la Fosse.



Mr. Keatinge said that in some parts of the Bombay Presidency there was a feeling among cultivators that the present curriculum gave a distinctly non-agricultural bias, some parents did not send their children to school because, they said, they would not want to work in the fields if they studied beyond the 3rd or 4th standard. From that point of view a break in the educational ladder was what the parents wanted. They wanted the boys to return to the land.

Mr. de la Fosse said he thought the option should be given to the boy to advance.

Continuing Mr. Keatinge referred to the matter of school farms and gardens and drew attention to the school organised by Sardar P. K. Bivalkar at Alibag.\* This was essentially a primary school financed by the Sardar. A progressively more agricultural tinge was given to the courses, and in the higher standard a plunge was made into more definitely agricultural instruction on a small scale. There were a certain number of men in the Bombay Presidency who were prepared to spend money on such matters, and though the Education Department might not be able to undertake it on a large scale, he thought that in some Provinces, with the personal assistance and financial help of well disposed zamindars, such education might be introduced.

As regards normal training, demonstration plots in connection with training colleges had been abandoned, 5 or 6 years ago, as not being very useful. Mr. Keatinge had been consulted, and thought it was better for the school master to get his material from the surrounding fields.

The President suggested that the "English" method referred to in his opening remarks was the simpler.

This was being tried, Mr. Fremantle said, in the United Provinces. Mr. Wood said that at a meeting convened by the Director of Public Instruction in Madras the decision had been arrived at that it was necessary to start from the beginning and put the teaching of nature study on a new basis. The first essen-

tial was the compilation of a text-book which should give the available materials and should be properly illustrated. The book would be written by an officer of the Education Department with the assistance and co-operation of the Agricultural and other Departments. The Agricultural Department was to assist by contributing both to the subject-matter and illustrations and by choosing three graduates in science who were to spend some time going round the Agricultural College, Government Museum, Fisheries Department, etc., in order to clarify their ideas with a view to the compilation of the text-book. The Agricultural Department could also assist by giving teachers experience of scientific work at the college. The three officers had been deputed and the matter was now pending. There was no idea of attempting to teach agriculture, but to bring teaching into relation with country life.

The President, reviewing the discussion, thought Mr. Keatinge had put the position in regard to this question in the right focus. Should the Education Department be approached with a view to modifying its text-books and its methods in the direction of giving an agricultural tinge to instruction in the primary schools; especially in the first four standards which comprised the rural schools which are more particularly concerned?

The President thought the illustration of Sardar Bivalkar's school rather indicated that even in special school of that kind it was neither necessary nor desirable to attempt anything in the way of special agricultural teaching.

The trend of the discussion showed that the attempt, in respect at all events to rural schools, should be abandoned—as far as the Education Department was concerned. Mr. Fremantle had admitted that the real trouble was the absence of teachers, and Mr. de la Fosse had emphasised it. The question was not so much whether curricula could be modified so as to bring about the desired reconciliation of the small boy with his destination in life, but whether teachers could be evolved for the end in view, and it seemed to the President that the only lines on which

action could be suggested to the Education Department were in the direction of endeavouring to give the teachers opportunities for improving themselves. Various suggestions had been made—demonstration farms attached to normal schools (which had been abandoned in two provinces), the deputation of school masters to an Agricultural College for a time, and so forth, but he deprecated suggesting any particular time. He believed the Education Department in each Province was fully alive to the problem, but he had had experience of the difficulties and he did not think the Conference had anything tangible to suggest, in the way of science teaching or otherwise, to justify the recording of an opinion which would amount to a kind of criticism of the Education Department in the matter of improving the quality of teachers.

As regards giving an agricultural tinge in school organisation, the President suggested that the Conference should record a hope that it might be possible to do something on the lines of Mr. Fremantle's suggestion for the adaptation of holidays to agricultural seasons, in the case of rural schools teaching up to the 4th standard. He thought this might also apply to schools in the country teaching above that standard.

The President deprecated going beyond legitimate aspirations in making suggestions in a matter that was primarily the business of the Education Department.

Coming to the question of text-books the President's opinion was frankly that they did not count. It was the teacher that counted. But at the same time, if a text-book could be devised that would guide the teacher sufficiently, one could not be sufficiently grateful.

The Conference adjourned till the following morning, when a draft resolution was considered in which it was proposed to record the Conference's opinion that the attempt to give an agricultural tinge to the curricula in primary schools should be definitely abandoned; and to add a suggestion that the holidays and vacations in rural schools might be arranged with special reference to the agricultural calendar.

Mr. Fremantle drew attention to the absence of any reference to hours of study and advocated the constitution of village committees and the half-time system as a means of inducing the cultivating classes to send their sons to schools and keep them there—which was what was wanted for the improvement of agriculture. At present in the United Provinces 80 per cent. of the boys left before they had reached even the 3rd class, and the time of the teachers was absolutely wasted. He referred again to his success in introducing the half-time system in the lower classes, and pressed for a definite recommendation to the Education Department that the curriculum should be so arranged up to the full primary standard that it could be got through in half the day. He suggested that there would be no difficulty in introducing the reform if the Education authorities thought it desirable. The course in the United Provinces which Mr. de la Fosse agreed a boy of ordinary intelligence got through in five years, might be extended to seven years, and made a little easier in the preliminary stages and much easier in the final stage. Boys would then be kept at school for half the time at the ages of 13 and 14 years when they would be learning something.

The President said it was a radical proposal that the primary course should extend to 14 years of age instead of 12, but proposed to extend the suggestion in the resolution so as to cover 'hours of study' as well as 'holidays and vacations,' and as Mr. de la Fosse saw no objection to making such a suggestion to Local Governments the proposal was agreed to.

Mr. Wood, referring to the 13th Resolution passed at the meeting of the Board of Agriculture at Coimbatore in 1913; questioned whether abandoning an agricultural tinge was not abandoning all "co-operation between the Educational and Agricultural Departments in adapting rural education to rural needs," which the Board had decided was a question of very great importance. He was supported by Mr. Mackenna, who said there was no reason why in school reading books illustrations should not be given from familiar objects—*e.g.*, rice in Burma, wheat

in the United Provinces, cotton in Bombay—described in simple language, without any attempt to teach agriculture or science.

A resolution was drafted to meet this view and agreed to in the following form :—

*Agricultural Instruction for Agriculturists* (1)—“ The Conference considered that all attempt to teach agriculture in primary schools should be definitely abandoned, but they desired to reaffirm Resolution No. XIII passed by the Board of Agriculture at Coimbatore. They

Resolution IV.

further suggested that the holidays and vacations and hours of study in rural schools might be arranged with special reference to the agricultural calendar.”

*Agricultural Instruction for Agriculturists* (2).—The second reference under this head was then discussed.

“ Is it desirable that there should be any general extension of the Bombay system of vernacular agricultural schools both in the Bombay Presidency itself and in other provinces ? ”

At the President's request Mr. Keatinge gave an account of these vernacular agricultural schools and of the results obtained.\*

A conference was held six years ago at Poona, members of the public being invited to make suggestions as to what the Agricultural Department might do to help agriculture. There had been a large body of opinion that some kind of agricultural instruction should be given in primary schools. The Director of Public Instruction said it was impossible for the Education Department to undertake this with the means and staff at their disposal, and so the Agricultural Department undertook it in a small experimental way. A school was started on a small part of the Poona Farm, and about a dozen students recruited from among the sons of substantial cultivators who habitually visited the farm. A Mahratta agricultural graduate, a self-reliant man of the cultivating class, was put in charge. The idea seemed popular, and after a year it was decided to expand and remove the school from the somewhat academic atmosphere of Poona to

\* Please see also Appendix III to Proceedings.

a more suitable place. Loni was selected because of the number of men of the large cultivator class in the neighbourhood and the high class of cultivation on the canal. Some of the best sugar-cane in the Presidency is grown there besides fruit and vegetables for the Bombay market. The course was of two years, for boys who had passed the 4th vernacular standard, aged 13 to 14. There were 3 or 4 hours in the day of general education, and 3 or 4 hours of work in the field. The whole of the cultivation was done by the boys, and they all learnt to make simple agricultural implements, the use and care of good steel implements, as well as to drive an oil engine which pumped water, bruised grain, etc. The profits were worked out by the boys who learnt arithmetic from sums in connection with their own plots. The teaching was entirely in the vernacular and the school was run entirely by the Agricultural Department. There was no examination by the Education Department.

The headmaster was an agricultural graduate on the same pay as others in the Department—Rs. 75 to 100—when confirmed, with the prospect of rising through various grades to any position in the Department. A second teacher was lent by the Education Department, and received a trifle more than his pay under that Department with a view to keeping him. There was also a man of the *mukadam* class for practical work.

Dr. Mann was instrumental in starting the school, and it got the maximum of supervision. One of the things which attracted parents was that their sons grew up in touch with a European officer. The school was constantly visited by Europeans.

Mr. Keatinge laid great stress on making the school and the work attractive. The Loni school was under a very competent graduate and was extremely well fitted up. Board and tuition were entirely free. The cost was Rs. 180 per student—half for establishment and half for board, apart from capital expenditure. He also emphasised the necessity of having as headmaster a good self-reliant man, as much as possible of the class that the boys came from; and the school should be in a good agricultural neighbourhood.

There were 45 boys at the Loni school out of 50 contemplated. The boys were still drawn mainly from the sons of large cultivators with whom the Department was in touch, though a considerable number of applicants were of the more literary class who were only admitted with great care. One of the difficulties was that the class from whom they wished to recruit were not accustomed to send their sons to a distance for an education.

The fathers of the boys expressed considerable satisfaction with the work done, and the boys certainly started real centres of interest in agricultural improvement on their return to their own lands. Mr. Keatinge thought their general ideas were also considerably enlarged by their course at the school.

Some visitors of the class most interested had offered to provide land, buildings, and money for a similar school in their neighbourhood if the Department would provide the teacher. This would be a day school to meet the local requirements, with a one year's course of dry cultivation. No difficulty was anticipated in filling it with boys probably over 13 or 14 years of age living or staying for the purpose in the vicinity.

A man in the Mahratta country who had made his money by his own cultivation and thought success depended on aiming at and trying every improvement, was so impressed with the idea of the school that he offered to build, endow, and assist in the supervision of a similar school, and to recruit students from the neighbourhood; and he threatened to undergo personal privation when there was a delay in obtaining Government sanction to the scheme. He had given land for the farm and buildings, and a very large endowment.

Another school on similar lines had been started in the Kanarese country, partly with Government money, with the aid of local subscriptions and endowments. A similar school at Government expense was proposed for Gujrati-speaking tracts.

In Sind there was a school of a different kind to meet the local circumstances; it aimed at training older boys to be land agents rather than cultivators.

Members of the Conference were keenly interested in

Mr. Keatinge's account of these schools, and expressed the opinion that if Government were to start similar schools in different parts of the country, a demand for them would probably spring up, and local support would be forthcoming from zemindars.

Mr. Wood said a landowner in Madras had applied to the Department with a view to starting a school.

Mr. Fremantle suggested that Mr. Keatinge should be asked to write a full note on the subject.

The President, commenting on the extraordinary enthusiasm of cultivators in Bombay for the idea of these schools, thought that the Conference which appeared to be in agreement on the question, should urge the consideration of the further extension of such schools as strongly as possible and commend it to Local Governments with a full explanation, as suggested by Mr. Fremantle. He emphasised the importance of the personal element in the school staff and the necessity of insisting on obtaining the best possible officers for the purpose, and proposed a resolution on these lines.

The President also suggested in this connection that in the course of time it might become necessary to supplement the agricultural vernacular schools, when they were sufficiently developed in any province, by an Agricultural High School, with a view to leading up eventually to the Agricultural College. The Agricultural Department which had entire control of these experimental vernacular schools and of the Agricultural Collages should also have control of such a connecting link as a high school of an agricultural character would supply.

Mr. Barnes wished to commend the private enterprise displayed in connection with these schools. He thought that one of the principal reasons for their success in Bombay was that the people themselves felt that they had a share in the project—which was not the case if everything was done by Government.

Mr. Clouston said a proposal had been made to start a school of this kind in Berar, but at present the Department had not got the staff. There was only about half the staff required for other purposes. They believed that the improvement of economic



conditions, by increasing farming profits, would stimulate a demand for more agricultural education. In ten years' time he thought the Department's staff would be sufficient to enable them to start vernacular schools ; at present they had a practical class on the Government farm, with a special course, and training in the use of agricultural machinery of all kinds.

Mr. Coventry pointed out that Mr. Clouston's view agreed with what he himself had said in regard to Agricultural Colleges. He again emphasised the urgency of making Government realise that if education were to be recognised as the business of the Agricultural Department, a proper and adequate staff was essential, so that there might be no set-back in the primary vocation of the Department—which was to raise the standard of agriculture in the country. He was not arguing against the Department undertaking both aspects, but deprecated education without due economic development and would make the educational aspect a plea for the general expansion of the Department.

Mr. Fremantle said that all that was required for these schools was supervision and one agricultural graduate and these the Department should be able to supply. Referring to the President's suggestion with regard to high schools, he thought it would spoil these vernacular schools if boys were given free board and education as a possible preliminary to an English education. He thought these schools stood by themselves.

The President agreed with the view that the primary object of the Department was the economic one—the improvement of the agricultural methods of the country. But he thought that the Conference would agree with him that in the light of what Mr. Keatinge had said, it was unquestionable that these vernacular schools showed a very direct tendency in that direction. Judging from the experiments so far as they had gone, these schools were a means, and a very promising means, of developing the economic resources of the country and creating the spirit that would aim at that.

He emphasised the value of cultivating such a spirit in the

minds of intelligent boys comparatively young, on a firmer basis than could be achieved merely by empirical demonstrations.

In the long run, he thought these schools would prove a more rapid means of developing the resources of the country than almost any other, and he welcomed Mr. Clouston's endorsement of the sense of the experiment.

The following Resolution was then agreed to :—

*Agricultural Instruction  
for Agriculturists (2)  
Resolution V.*

"The Conference regard the Bombay experiment as a very valuable one and suggest that Mr. Keatinge be asked to prepare a fully explanatory memorandum for communication to Local Governments for their consideration. They desire to express the opinion that the success of the extension of the experiment would depend on the very careful selection of the master on the educational side and the agricultural officer on the agricultural side."

"The Conference wish especially to commend the private enterprise and public spirit displayed in opening fresh vernacular agricultural schools in Bombay and to suggest that, wherever possible, private enterprise of this character should be fostered."

*Agricultural Instruction for Agriculturists (3).—*The President then read the next reference.

"Should such schools be controlled entirely by the Agricultural Department in co-operation with the Education Department? How should the teaching staff for them be recruited?"

The President thought the discussion on the previous reference had practically disposed of this question—the schools should be entirely controlled by the Agricultural Department with the co-operation of the Education Department so far as the loan of educational officers might be a desideratum.

Mr. de la Fosse entirely agreed,—these were trade schools. In reply to Mr. Coventry he said that in Great Britain such schools were controlled by the Board of Education but the County Councils really had their own training schools, and the Board's control was merely nominal. In France there was a department,—entirely separate from the Education Department,—

which looked after training schools; and probably the French training schools were the best in the world.

The President observed that in England the schools for which the County Councils were responsible were, so far as the Board of Education was concerned, merely subject to inspection with a view to ensure compliance with certain requirements as regards holidays, etc.

Mr. Keatinge said that in Ireland there was, in each of 21 divisions, a school which corresponded in its general nature very closely with the Bombay schools. He believed they were controlled by the Department of Agriculture.

The Conference decided that it was unnecessary to answer directly the question as to how the staff should be recruited, and adopted the following Resolution.

*Agricultural Instruction for Agriculturists (3).*—"Such schools should be controlled entirely by the Agricultural Department which should rely on the Education Department for co-operation only in respect of the staff which it may be desired to borrow from them."

Resolution VI.

*Agricultural Instruction for Agriculturists (4).*—"The last reference on the agenda was then discussed; "In what ways can the cultivator who is working his own land be educated or continue his education in Agriculture? Are demonstration and instruction on the Agricultural Department's own farms sufficient and are they preferable to vernacular or agricultural courses in connection with the Agricultural Colleges?"

The President deprecated dogmatising on this question—which had really been debated throughout the previous discussions. He suggested leaving the question unanswered pending the accumulation of experience on the lines already recommended by the Conference.

Mr. Keatinge advocated short courses for cultivators on Government farms, provided there were a definite programme of specific instruction to be given in a definite time. He gave

instances of short courses for the teaching of such definite things as new systems of sugarcane planting and cultivation or for gur-making; there was an increasing demand for such courses in Bombay and he thought they were of great value. Courses were started whenever required to popularise a new improvement, *e.g.*, a new pump, and were abandoned when the improvement had been sufficiently promulgated.

Mr. Wood thought the success of these courses in Bombay was largely due to the previous extension of district work. In Madras a demand would no doubt arise when a sufficient amount of district work had been done, but he deprecated starting such courses at present.

Mr. Clouston said these practical courses had been very successful in the Central Provinces, where Agricultural Associations had also been extensively developed. The leading men of each tahsil met twice or thrice a year and heard lectures or read papers on improvements they had found out.

Mr. Mackenna classified agricultural teaching in two systems—taking people to things and taking things to people—both systems were found working together. He agreed with the President that the question should be left open.

It was decided formally to record that—

“In view of the different stages of development reached by the Agricultural Department in different Provinces, the Conference felt itself precluded from passing any general Resolution on these questions.”

The President, in conclusion, after referring to previous Resolutions by the Board of Agriculture on the subjects discussed, said the object of having a separate Conference had been to crystallise and to bring into greater prominence than would otherwise be the case the educational aspect of the problem of the development of the economic resources of India. He hoped the resolutions come to would not only appreciably affect Local Governments, but excite a more definite interest in the minds of the public and perhaps also a more active co-operation on the part of private enterprise.

The Conference closed with a vote of thanks to the Hon'ble Member for presiding.

## Statement showing the system of Agricultural Education followed

## SYSTEM IN REGARD TO STUDENTS FOR HIGHER INSTRUCTION.

Coimbatore College.	Cawnpore College.	Lyallpur College.
<p>(i) Two courses of instruction are given at the College. The first course is complete in itself and extends over a period of two years. The second course, which is in continuation of the first and which is intended to give further training in the sciences allied to agriculture, last eighteen months.</p> <p>(ii) The students of each year shall form a separate class.</p> <p>(iii) The number of students in each class in the first course shall ordinarily be 40 and that in each class of the second course 20.</p> <p>(iv) The following is the curriculum:—</p> <p><i>First course (two years).</i></p> <p><i>First year: General Agriculture—(a) Practical work.</i>—Field classes for practical work on the farm will be held daily throughout the year. In these classes the students will be engaged in actually performing all the operations carried out on the farm. This includes the cultivation of dry, garden and wet crops and the treatment of both red and black soils. A complete agricultural year, as far as arable farming is concerned, will be worked through.</p> <p>(b) <i>Lectures.</i>—These will be arranged to follow the work which is being done on the farm and will deal with preliminary cultivation, the nature of soils, retention of soil moisture, tillage, ploughs, harrow, rollers, etc., manures and manuring, farm-yard manure, storage, application, etc., green manuring and artificial fertilizers, how plants feed, etc., seed and sowing preparation of seed beds, drilling, germination of seed, precautions to prevent disease in seed, etc., weeding, and, after cultivation, transplantation, weeding, irrigation, drainage, rotations, annual and perennial weeds, common pests or diseases on crops, etc., harvesting of various crops and harvesting implements, seed selection, etc., threshing and identification of different seeds and grains, identification of weed seeds likely to be present in samples of grain, etc., storing and marketing and farm machinery.</p>	<p>There will be two courses at the college, one of which will be of two and the other of four years' duration. The first of these, in which the teaching will be mainly of a practical character, is intended for the members of the agricultural community who wish to enter the Lower Subordinate Agricultural Service or will return to manage their own land or estates. The second, for which higher educational qualifications will be required, is designed to give a full training in agriculture, and the connected sciences. Direct appointments to the higher grades of the subordinate service, and to the posts of assistants in the science section will ordinarily be made from among the students who have obtained the diploma in the four years' course.</p> <p><i>Qualifications for admission.</i>—Students entering the college with a view to going through the four years' course will be required to possess the school-leaving certificate. No special educational qualifications will be required for students of the two years' course; but preference will be given to youths who have passed the Vernacular Final examination. Students entering for the two years' course may be permitted to join the four-year section at the end of their first year, if it is considered that they possess the necessary qualifications for the higher course.</p>	<p>A new course divided into two parts, each of two years' duration, has been introduced in the Agricultural College at Lyallpur on lines somewhat similar to those of the Coimbatore College. The entrance qualification for the preliminary course is the Entrance Examination of the Punjab University. The first part consists of agricultural tuition, both practical and theoretical, with such elementary lectures in science as will enable the student more clearly to comprehend the lectures in agriculture. The science lectures are really a part of the agricultural course, though they are delivered by the Professors of Agricultural Chemistry, Botany and Entomology. In addition to the annual instruction is given in the college workshop and a simple course in Veterinary Science in the Civil Veterinary Hospital. English and arithmetic have been included in the first part as experience has shown the necessity of further tuition in these subjects for the students entering the Agricultural College. This two years' course will qualify a student for admission into the subordinate ranks of the Agricultural Department as Agricultural Assistant as well as for such posts as Estate Managers, etc. The second part of the course leading to the diploma examination will include instruction in the sciences appertaining to Agriculture, and will not</p>

# Proceedings—I.

*in the various Provincial Agricultural Colleges in India.*

## SYSTEM IN REGARD TO STUDENTS FOR HIGHER INSTRUCTION.

Nagpur College.	Sabour College.	Poona College.
<p>The course at the Nagpur Agricultural College, has, with effect from 1st July 1916, been divided into two parts; the first part will be of two years' duration during which agriculture, practical and theoretical, will be taught, with only so much allied science as will be necessary to enable the students to grasp fully the meaning of the theory and practice of agriculture. Ordinarily only Matriculates will be admitted to the course, but exceptions will be made in special cases. At the end of two years, the students will be examined and those who pass will obtain a diploma in Agriculture which will entitle them to obtain Government Service in the lower grade of Agricultural Assistants. Such men will be also well qualified to manage their own or others' farms and will be eligible for service in the Settlements and Land Records Departments and under the Court of Wards. Those who pass this examination in the first division will be eligible, if they like, to continue their studies and take a higher course of science. This course will be of a year and a half and those who pass the examination at its end will be eligible for the degree of L. Ag. They will also be qualified for employment under Government in the upper grades of Agricultural Assistants, from which every man who gives satisfaction may expect to rise to provincial rank as Extra Assistant Director, and perhaps later even as Extra Deputy Director, though this grade has not yet been created.</p>	<p>There has been no change yet in the curriculum of the Sabour College and the teaching work continues at present on the same lines as in previous years, that is, in accordance with the standard curriculum laid down by the Board of Agriculture in India in 1906, and amended by the Board of Agriculture in 1908, which prescribes a three years' course, at the end of which successful students are granted a degree of Licentiate of Agriculture (L. Ag.). A scheme for the revision of the College curriculum so as to bring it into line with the other Agricultural Colleges in India is under consideration and it is hoped that it will take effect from the beginning of the next educational year.</p>	<p>The Poona Agricultural College is affiliated to the Bombay University. It is the only Agricultural College which is affiliated to a University. The course followed is that which was sanctioned by the University Senate in November 1909 and is based on the standard curriculum recommended by the Board of Agriculture in 1906 but modified to suit local conditions. The course is a three-year one and on successful candidates the Bombay University confers the degree of Bachelor of Agriculture (B. Ag.). The qualification on which the Bombay University insists is the previous Examination and this qualification is insisted on in the case of practically all students from the Bombay Presidency itself. No student can appear for the University Agricultural degree without it.</p> <p>A few students who are not admissible to the University Examination take the regular course along with the other students. These exceptions arose from the fact that it was decided by the Government of Bombay to allow scholars to be received from Sind who had only passed the Matriculation Examination provided they received the same course and passed by the same standard as the University demands.</p>

## Statement showing the system of Agricultural Education followed

## SYSTEM IN REGARD TO STUDENTS FOR HIGHER INSTRUCTION.

Coimbatore College.	Cawnpore College.	Lyalpur College.
<p>Lectures will also be given in mensuration, plan-drawing and simple estimates, surveying and levelling.</p> <p><i>Second year : General Agriculture—(a) Practical work</i>—Students will be on the farm only about half the time allowed for practical work and then will be chiefly engaged in the cultivation of their own plots. On other days they will work in the dairy, the veterinary hospital, on cattle-feeding and tending, in the seed store, in the gardens on budding, grafting, etc., in the carpentry and smithy workshops at the care of oil-engines and farm machinery.</p> <p><i>(b) Lectures.</i>—These will deal with animals—the various breeds, care and feeding of animals and the commonest diseases, the dairy, milk and ghee; also in more detail than in the previous year with the chief agricultural crops of the Presidency and their commonest fungoid diseases and insect enemies, and the remedies; also on the objects and the purpose of forests and on rent and tenures. Instruction in mensuration, surveying, levelling, etc., will be continued.</p> <p><i>Second course (one and-a-half years). Agriculture.</i>—Farm methods and management and rural economy, experimental methods, and the control of simple experiments, principles of breeding.</p> <p><i>Veterinary science.</i>—The ox, sheep, goat and buffalo. The skeleton and position and names of principal internal organs. The function of the digestive, circulatory, respiratory, urinary and genital systems. Care of animals in health and disease. Diagnosis of common ailments and treatment thereof by simple surgical and medicinal methods.</p> <p><i>Engineering.</i>—Motive power on the farm.</p> <p><i>Agricultural Chemistry</i>—General chemistry (inorganic and organic) and a general course of elementary agricultural chemistry which will include the general chemistry of soils, the general composition and properties of manures, the composition of food stuffs, feeding of animals and the chemistry of the dairy. Instruction is given in both theoretical and practical work.</p> <p><i>Agricultural Botany.</i>—The general, internal and external structures and physiology of the agricultural plants of the Presidency, the adaptation of the</p>	<p><i>Course of study.</i>—Two years' course.</p> <p>The course of study will consist mainly in the teaching of agriculture in its different branches, in the farm and lecture room. In their second year, students will be required to work themselves plots of land made over to them. In addition, instruction will be given in dairying, care of cattle, veterinary practice, agricultural entomology, agricultural engineering (use and repair of machinery, well-boring, control of oil-engines, etc.). The scientific teaching given will be of simple character designed to illustrate and explain agricultural practice. The instruction will be given in Hindustani; and there will be optional classes in English and Mathematics, special courses can be arranged if desired for horticultural work.</p> <p><i>Four years' course.</i>—In the first two years the course, which will be taught entirely in English, will consist mainly of practical agriculture on the farm and the special subjects of dairying, care of cattle, veterinary practice, agricultural engineering noted above, with elementary physics, chemistry, botany, and zoology. In the third and fourth year greater prominence will be given to the scientific subjects in which teaching of a more advanced character will be given, and the time devoted to agricultural practice will be curtailed. Instruction will</p>	<p>come into operation until the session 1918-17. In this part systematic lectures will be given in the sciences of Agricultural Chemistry, Botany, Entomology, Veterinary Science, Agricultural Engineering, Land Revenue and more special instruction in agriculture. The qualification for admission to the Second Part of the course will be a first class leaving certificate for the First Part.</p>

*the various Provincial Agricultural Colleges in India—contd.*

SYSTEM IN REGARD TO STUDENTS FOR HIGHER INSTRUCTION.

Nagpur College.	Sabour College.	Poona College.



## Statement showing the system of Agricultural Education followed

## SYSTEM IN REGARD TO STUDENTS FOR HIGHER INSTRUCTION.

Coimbatore College.	Cawnpore College.	Lyallpur College
<p>structure and habit of a plant to its environment, the principles of plant breeding and selection, the principles of horticulture, the natural orders as far as they relate to plants of agricultural importance (including the study of crops).</p> <p><i>Mycology.</i>—A general study of the common fungus diseases of cultivated plants in the Madras Presidency together with approved and suggested methods of prevention or control.</p> <p><i>Entomology.</i>—Study of types of insects and their life histories; useful and harmful insects; crop pests and remedies. Practical collection of insects found on the farm and observation of their habits; trial of preventive and remedial measures.</p> <p>4. <i>Admission.</i>—(i) <i>First course</i>—Students from all parts of India without distinction of caste or nationality are eligible for admission, but preference will be given to those from the Madras Presidency and Coore. The Principal has full discretion to choose from amongst the applicants those whom he considers most suitable; but in making the selection he will endeavour, as far as possible, to ensure that all parts of the Presidency are fairly represented. Candidates must have reached the age of eighteen years on or before the 15th of May in the year when application is made and must produce the following certificates:—</p> <p>(a) Certificate of physical fitness, granted by a qualified medical man in independent charge of a hospital or dispensary.</p> <p>(b) Vaccination certificate, showing that the candidate has been vaccinated or has had small-pox after the age of 10.</p> <p>(c) University certificate, if any.</p> <p>(d) Testimonials of good character covering the previous two years.</p> <p>(e) Leaving certificate from the last school or college.</p> <p>Candidates must apply to the Principal on or before the 15th of May in each year and applications must be in their own handwriting in the form prescribed.</p>	<p>also be given in rural economy and the technique of co-operation.</p> <p><i>Diploma.</i>—Students who qualify in the final examination prescribed for the four years' course will receive a diploma of Licentiate in Agriculture.</p> <p><b>OTHER COURSES.</b></p> <p>It has been suggested that the College should provide for a third class of students, namely, the sons of small zamindars or large occupancy tenants who want a short course of instruction in farm methods. After careful consideration it has been decided that this class of students must be kept out of the College altogether as there is no room or time for them in that institution, but it is hoped to start classes of six or eight months' duration for such students in some of the demonstration farms of the Agricultural Department.</p> <p>A separation of the Kannyo students from the Cawnpore College has been effected: a separate school being established for candidates for Kannyo-ships.</p>	<p><b>OTHER COURSES.</b></p> <p>In addition to the new syllabus another new departure has been made in extending the class for Assistant Commissioners in Indian rural economy so as to include a number of Canal Officers, Extra Assistant Commissioners and Canal Zilladars. The instruction in this class is given in English and for the most part by the Professor of Agriculture.</p> <p>There is also a six months' vernacular class which is attended mostly by the sons of zamindars.</p>

*in the various Provincial Agricultural Colleges in India—contd.*

SYSTEM IN REGARD TO STUDENTS FOR HIGHER INSTRUCTION.

Nagpur College.	Sabour College.	Poona College.
<p><b>OTHER COURSES.</b></p> <p>A separate farmer's course which was formerly held, is now no longer considered necessary.</p> <p>A College Demonstration Circle has been created from 1st January 1915. This serves to keep the Principal in closer touch with the actual conditions of agriculture in the Provinces as well as providing him and his students with opportunities of getting away at times from the routine of the class-rooms, laboratories and the college farm.</p>	<p><b>OTHER COURSES.</b></p> <p>There are two short courses called the <i>Bhadi</i> short course and the <i>Rabi</i> short course. The boys attending these courses are given lectures in the vernacular on agriculture and other sciences and are allowed to leave the college on satisfying the lecturers that they have acquired some sound elementary ideas on scientific agriculture. Training of cultivators' sons is undertaken at experimental farms. The present system of training cultivators' sons at the experimental farm has not proved attractive to the genuine cultivating classes partly because it is still necessary to convince them of the advantages of scientific agriculture by demonstrating the results of successful experiments at their doors. With the gradual increase of staff, arrangements will be made to do this through <i>Lamdars</i> and with the help of the District Agricultural Associations and Co-operative Credit Societies. Another reason is that adequate stipends and the cost of journeys to and from their homes must be paid to them so that they may not suffer any pecuniary loss.</p> <p>The experiment is also being tried, in Orissa of</p>	<p><b>OTHER COURSES.</b></p> <p>A short course of instruction is also given at the College. This course is intended for farmers and landowners' sons. For this the sole qualifications are that the student should know English and have a fairly good general education. The training given is essentially a practical one and is designed to give men as good an acquaintance as possible with the best methods of agriculture applicable to Bombay. The College also gives a short three weeks' course in agriculture which all Junior Members of the Indian and Provincial Civil Service have to take.</p> <p>Vernacular Agricultural Schools have been established in different parts of the Presidency, the most successful being the one at Loni. The object of these schools is to give a thoroughly practical agricultural training to boys who belong to good substantial village families and whose object in life is to cultivate and manage their own land. The boys receive a two years' course in agriculture while their general education is continued with an agricultural basis. The curriculum involves at least half the working time being spent in farm work, or in gardening, in dairying or in other agricultural operations. The boys do practically all the work in the land allotted to their use, and they produce the food, except the grain and pulses used in the school. The school work, more properly so called, consists of arithmetic, more especially including farm accounts on the one hand, and menuration applied to agricultural purposes on the other,</p>

*Statement showing the system of Agricultural Education followed*

SYSTEM IN REGARD TO STUDENTS FOR HIGHER INSTRUCTION.

Coimbatore College.	Cawnpore College.	Lyallpur College.
<p>Students who fail in the examination at the end of this course may, at the discretion of the College Board, be permitted to attend the second-year classes again and appear once more for the examination.</p> <p>(ii) <i>Second course.</i>—Candidates for this course must have already obtained the certificate in the first course and have passed the Matriculation Examination of the Madras University or some other examination declared by the Government to be equivalent thereto, or possess a secondary school-leaving certificate showing that they have secured 45 per cent. or more marks in English and 35 per cent. in other subjects. Students who have not the qualifications stated above may be permitted to take the course if the College Board is satisfied that they are likely to benefit by the instruction to be given therein.</p> <p><b>OTHER COURSES.</b></p> <p>No rules have been framed for special courses. As the changes introduced into the College are throwing a lot of work on the College staff it is impossible at present to consider taking in students for special short courses.</p>		

*in the various Provincial Agricultural Colleges in India—concl'd.*

SYSTEM IN REGARD TO STUDENTS FOR HIGHER INSTRUCTION.

Nagpur College.	Sabour College.	Poona College.
	<p>encouraging nature study and the study of plant life in Gura Training, Middle English and Primary Schools by the award of medals and diplomas to the Gurus and students. The good effects of the scheme, it is reported, are most marked in the Gura Training schools. This is considered most important as the future of primary education in Bihar and Orissa lies largely with the Guras under training. The Inspector of Schools, Orissa Division, reports that the primary schools are so numerous and the prizes are so few that but little effect is yet discernible there and recommends a considerable increase of expenditure in this direction.</p>	<p>nature study largely taught practically, writing and reading, geography of India, especially in relation to crops, the principles of agriculture, and two new subjects: (1) village life, including sanitation, hygiene, and secondary occupations suitable for villages; and (2) what is described as "citizenship," which includes questions of how to obtain money by lakavi, by co-operative credit, etc., and in addition, the system of local and village Government in that part of India.</p> <p>In connection with these vernacular schools the Government of Bombay on the 28th May 1915, issued a special Press note* drawing attention to an interesting experiment which is being carried out by Sardar P. K. Bivalkar, at Alibag. The Sardar's chief idea is to interest the sons of agriculturists in their father's profession at an early age and thus induce them to remain agriculturists after their education has been completed. With this object an experimental school was started at Veshvi near Alibag. The pupils in the infant, first and second standards, receive instruction according to the ordinary curriculum laid down by the Educational Department for primary schools. The boys in the third standard also do the ordinary work of the standard but in addition receive elementary instruction in the theory and practice of agriculture and home industries such as poultry farming, dairy farming, bamboo work, rope making and carpentry. By the close of 1914 a fourth standard class had been formed and since then agricultural courses to accompany the ordinary departmental standards V to VII have been under preparation so that the school hopes to be able eventually to teach the full primary course supplemented by agricultural education. It is added that though agricultural teaching proper begins only at the third standard, yet no effort is spared to train boys in the lower standards in nature study and thus to predispose them to an interest in their future studies.</p>

\* Appendix II to Proceedings.

## Appendix to Proceedings—II.

BOMBAY CASTLE, 28TH MAY 1915.

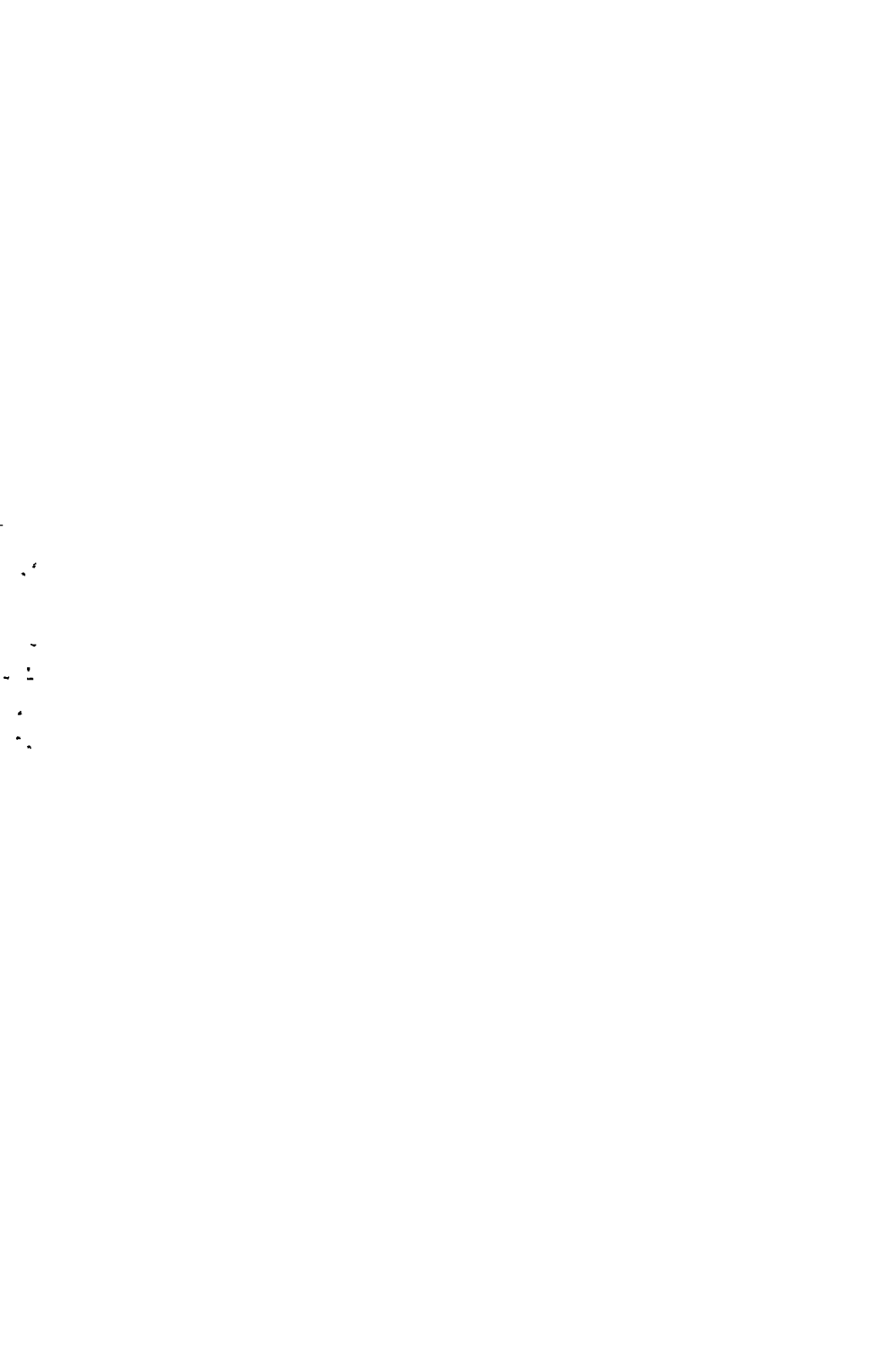
No. 5942. The following Press Note No. 5941, dated 28th May 1915, regarding the combined Primary and Agricultural School at Alibag is published for general information.

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### PRESS NOTE.

His Excellency the Governor in Council desires to draw attention to an interesting experiment which is being carried out by Sardar P. K. Bivalkar at Alibag. The Sardar's chief idea is to interest the sons of agriculturists in their father's profession at an early age and thus to induce them to remain agriculturists when their education is complete instead of despising a most honourable profession which is the backbone of India. A country which can boast an educated peasantry is certain to improve its agriculture, if only because the broader ideas which are begotten of sound education render their possessors more ready to accept and act on the advice of agricultural experts.

2. Sardar Bivalkar put his ideas to a practical test by starting in 1912, an experimental school at Veshvi near Alibag with the co-operation and advice of the Collector of Kolaba and the Agricultural Department. To begin with only 40 boys were admitted and three primary classes were opened under two teachers. At the same time steps were taken to procure an agricultural graduate as headmaster, but it was not till November 1913 that a trained graduate was available. By this time there were 60 boys in the school and four classes. The pupils in the infant, first and second standards received instruction according to the ordinary curriculum laid down by the Educational Department for primary schools. The boys in the third standard also did the ordinary work of the standard, but in addition received elementary instruction in the theory and practice of agriculture and home industries such as poultry farming, dairy farming, bamboo work, rope-making and carpentry.



for small children can hardly be managed unless this kind of local assistance is available.

5. It is probably within the knowledge of the public that Government already maintain certain agricultural vernacular schools. The first was that at Loni in the Poona District, and similar schools have been provided for Sind and the Southern Maratha Country. The Department's programme includes a school at Jambul in the Thana District for which the capital expenditure is being provided by the Committee of the Sir Sassoon David Trust Fund and the recurring expenditure by Mr. Pisal, and another school at Godhra in the Panch Mahals. Progress with the Godhra School, has, however, been temporarily interfered with by the necessity for retrenchment which is under present circumstances unavoidable. The Government schools and the Alibag school serve somewhat different purposes. The former give a complete vernacular education and add to it a comprehensive practical course in agriculture during which the pupils are not only familiarized with the technique of the profession but are taught to appreciate the possibilities of agricultural progress and the directions in which it may be secured. These schools, therefore, attract the children of the bigger landholders who have estates to manage and develop. But the Alibag school is less ambitious. No doubt one of its aims is to broaden the outlook of its pupils—that is, an aim common to all sound systems of education—but its most useful purpose is to teach the children of small cultivators to be personally good cultivators without troubling their heads overmuch with the purely literary side of education. Different classes and different localities call for different treatment, and His Excellency the Governor in Council believes that in this Presidency there is certainly room for these two types of agricultural schools and possibly for more than two.

By order of His Excellency the Right Honourable the Governor in Council.

G. CARMICHAEL,  
*Chief Secretary to Government.*

## Appendix to Proceedings—III.

*Copy of a demi-official letter from G. F. Keatinge, Esq., I.C.S., Director of Agriculture, Bombay, to the Hon'ble Mr. C. H. A. Hill, C.S.I., C.I.E., I.C.S., Member in Charge of the Department of Revenue and Agriculture and Public Works Department, Government of India, No. 9673, dated the 18-19th October 1915.*

Your demi-official of the 13th instant.

As regards the information regarding the subsequent work of the boys who have been through our Agricultural Vernacular Schools, I send you herewith a list showing what has become of all the boys who have passed through the Loni School so far as we have been able to ascertain; the analysis works out as follows:—

1. Working on their own land . . . . .	28
2. Doing agricultural work either for some Government Department or for some private person . . . . .	6
3. Going through some further course of education . . . . .	5
4. Managing his own corn-grinding mill . . . . .	1
5. Career not known . . . . .	18
6. Left without passing . . . . .	2
7. Looking for service . . . . .	1
Total . . . . .	61

It seems to me fairly clear that the sons of substantial cultivators go back to work on their own lands and they cannot fail to profit by the education that they get at the Agricultural School. Several of them are known to be doing very well and to have introduced new agricultural methods in their home farming. It is perhaps natural, and not to be deprecated, that some of the boys should be taken with the idea of further education and should afterwards go on to technical colleges or English schools; but of course we shall have to see that our Agricultural schools are not used as a place to fill up time before the boys join a High School and learn English.

We teach engine driving at the schools, which accounts for one of our pupils starting a corn-grinding mill of his own. As regards the Agricultural Schools in Sind 8 boys passed out last year. Of these—

- 2 are employed by Zamindars,
- 3 are working their own lands,
- 1 is working as a Tapedar,
- 2 are shortly expecting employment by Zamindars.

The school at Devihosur has not yet completed two years of life, so no boys have yet passed out of it.



*List of the passed students of the Ternacular Agricultural School,*

No.	Name.	Passing year.	Village.	Taluka.
1	Balkrishna R. Yadar . . .	1912	Undri . . .	Pelo-Panhala . . .
2	P. T. Patil . . . . .	1912	Miri . . . . .	Novesa . . . . .
3	K. B. Changale . . . . .	1912	Bavchi . . . . .	Valva . . . . .
4	J. B. Kakdi . . . . .	1912	Limbati . . . . .	Bhimthadi . . . . .
5	T. R. Patil . . . . .	1912	Ale . . . . .	Junirar . . . . .
6	G. S. Patil . . . . .	1912	Dyane . . . . .	Baglan . . . . .
7	M. G. Patil . . . . .	1912	Kapkhede . . . . .	" . . . . .
8	V. M. Gaokwad . . . . .	1912	Poona Somwar 60.	Havele . . . . .
9	D. V. Takle . . . . .	1912	Ropla . . . . .	Sholapur . . . . .
10	A. D. Karandikar . . . . .	1912	Maldoli . . . . .	Chiplun . . . . .
11	A. U. Khate . . . . .	1912	Palaskhede . . . . .	Bhusaval . . . . .
12	G. V. Kulkarni . . . . .	1912	Samserpur . . . . .	Akola . . . . .
13	D. T. Patil . . . . .	1912	Satana . . . . .	Satana (Baglan)
14	G. S. Patil . . . . .	1912	Munjvad . . . . .	Paglan . . . . .
15	G. S. Sonavane . . . . .	1913	Ashvi . . . . .	Sangaumer . . . . .
16	M. L. Nikan . . . . .	1913	Salabatpur . . . . .	Nevasa . . . . .
17	T. R. Mahashabde . . . . .	1913	Chandanpuri . . . . .	Malegaon . . . . .
18	N. G. Pawar . . . . .	1913	Ankoli . . . . .	Madhe . . . . .
19	V. K. Gandhi . . . . .	1913	Rahate . . . . .	Kopergaon . . . . .
20	K. T. Patil . . . . .	1913	Khedgaon . . . . .	Chalisgaon . . . . .
21	B. S. Tikekar . . . . .	1913	Tike . . . . .	Ratnagiri . . . . .
22	D. V. Gole . . . . .	1913	Parinehe . . . . .	Lurandhar . . . . .
23	S. A. Kulkarni . . . . .	1914	Shrivardhan . . . . .	Janjora . . . . .
24	V. D. Bhagwat . . . . .	1914	Belgaum . . . . .	Belgaum . . . . .

*Loni, showing their full address, with the passing year.*

District.	Post Office.	REMARKS.
State Kolhapur	Panhala	Working on his own farm at Undri.
Nagar	Miri	Serving at Jalgaon under Mamlatdar for Societies.
Satara	Ashte	Working on his own farm.
Poona	Karanje	Ditto ditto.
"	Ale	Had gone to an English school.
Nasik	Dyano	Working on his own farms.
"	"	Has purchased land at Vyara in Baroda State and works there.
Poona	Poona	Serving on Jalgaon farm as fieldman.
Sholapur	Sholapur	Is in the final year in the Nagpur Agricultural College.
Ratnagiri	Shiral	No information.
Khandesh	Badvad	Has joined Technical Institute at Amnotti, Borar.
Nagar	Samserpur	No information.
Nasik	Satana	Working on his farms.
"	"	Was working on his farms. At present his whereabouts are not known.
Nagar	Ashvi	Was serving in Irrigation Department (Pravara Canals).
"	Novasa	Working on his own lands.
Nasik	Malegaon	Has accepted private service.
Sholapur	Ankoli	Working on his farms.
Nagar	Rahato	Was working on his farms. Current information not available.
Khandesh	Khedgaon	Serving in Agricultural Department in Khandesh.
Ratnagiri	Ibhran pattan	No information.
Poona	Parincho	Has joined English school.
Kolaba	Shrivardhan	Serving under Cotton Supervisor, Khandesh.
Bolgaum	Bolgaum	Working on his lands in Gujarat.

*List of the passed students of the Vernacular Agricultural School,*

No.	Name.	Passing year.	Villago.	Taluka.
25	M. G. Thakur . . . .	1914	Vite . . . .	Vite . . . .
26	D. M. Pendse . . . .	1914	Agasi . . . .	Bassein . . . .
27	D. V. Patil . . . .	1914	Ashvi (K) . . . .	Somgamner . . . .
28	D. S. Koskar . . . .	1914	Vairag . . . .	Basshi . . . .
29	L. P. Jadhav . . . .	1914	Shelgaon . . . .	" . . . .
30	M. R. Changule . . . .	1914	Shelgaon . . . .	Basshi . . . .
31	C. D. Nono . . . .	1914	Poona . . . .	Haveli . . . .
32	N. S. Kulkarni . . . .	1914	Alsund . . . .	Satara . . . .
33	V. T. Pandit . . . .	1914	Sholapur . . . .	Sholapur . . . .
34	V. A. Naik . . . .	1914	Brahmangaon . . . .	Kopergaon . . . .
35	V. S. Khadilkar . . . .	1914	Hubli . . . .	Hubli . . . .
36	S. G. Nadkarni . . . .	1914	Shivdao . . . .	Savatwadi . . . .
37	R. H. Hardikar . . . .	1914	Valva . . . .	Valva . . . .
38	K. B. Shelke . . . .	1914	Kadus . . . .	Khed . . . .
39	K. D. Kulkarni . . . .	1914	Limpangaon . . . .	Shriganda . . . .
40	P. G. Apte . . . .	1914	Amnapur . . . .	Tasgaon . . . .
41	S. N. Patil . . . .	1914	Chikalgud . . . .	Hukeri . . . .
42	S. S. Machale . . . .	1914	Pendeshwar . . . .	Purandhar . . . .
43	K. G. Shitole . . . .	1914	Kurkumb . . . .	Bhimthadi . . . .
44	A. B. Dhogo . . . .	1914	Kotul . . . .	Akola . . . .
45	M. B. Patil . . . .	1914	Sarud . . . .	Panhala . . . .
46	N. N. Gole . . . .	1915	Tryambak . . . .	Nasik . . . .
47	D. R. Paradkar . . . .	1915	Mardi . . . .	Sholapur . . . .
48	S. N. Kulkarni . . . .	1915	Vadgaon . . . .	Junnar . . . .
49	R. K. Khodko . . . .	1915	Malegaon . . . .	Malegaon . . . .
50	S. V. Mandke . . . .	1915	Valha . . . .	Purandhar . . . .
51	N. G. Gumaste . . . .	1915	Khanapur . . . .	Khanapur . . . .

*Loni, showing their full address, with the passing year—could.*

District.	Post Office.	RE MARKS.
Satara . . .	Vite . . .	Working on his farms.
Thana . . .	Agari . . .	No information.
Nagar . . .	Ashvi (B) . . .	Ditto.
Sholapur . . .	Vairag . . .	Working on his farms.
" . . .	" . . .	Ditto.
" . . .	" . . .	Ditto.
Poona . . .	Poona . . .	Manages his grinding mill at Dhond.
Satara . . .	Devarashte . . .	Working on his land.
Sholapur . . .	Sholapur . . .	No information.
Nagar . . .	Nagar . . .	Working on his estate.
Dhawalwar . . .	Hubli . . .	No information.
... . .	Savatwadi . . .	Left the course without passing.
Satara . . .	Valva . . .	Gone through Geneshkhind course and has just begun working.
Poona . . .	Kadus . . .	Working on his own lands.
Nagar . . .	shriganda . . .	No information.
Satara . . .	Palus . . .	Has taken lands in Gwalior State and works there.
Bolgaum . . .	Hukeri . . .	Left the course without passing.
Poona . . .	Mergaon . . .	Working on his lands.
" . . .	Ravangaon . . .	Ditto.
Nagar . . .	Kotul . . .	No information.
Kolhapur . . .	Panhala . . .	Ditto.
Nasik . . .	Tryambak . . .	Passed last April. No information at present.
Sholapur . . .	Sholapur . . .	Passed last April. No information.
Poona . . .	Boribadruk . . .	Ditto ditto.
Nasik . . .	Malegaon . . .	Has joined English school.
Poona . . .	Valha . . .	Passed last April. No information.
Satara . . .	Khanapur . . .	Ditto ditto.

*List of the passed students of the Vernacular Agricultural School*

No.	Name.	Passing year.	Village.	Tahsil.
52	B. P. Palande . . .	1915	Fursungi . . .	Haveli . . .
53	V. R. Kanitkar . . .	1915	D. al . . .	" . . .
54	G. T. Patil . . .	1915	Yevla . . .	Yevla . . .
55	S. R. Nilam . . .	1915	Nagarsul . . .	" . . .
56	D. R. Taloukar . . .	1915	Ashle . . .	Isampur . . .
57	B. T. Gali . . .	1915	Shelgion . . .	Harshi . . .
58	B. D. Patil . . .	1915	" . . .	" . . .
59	S. H. Kamat . . .	1915	Murgul . . .	Parasgod . . .
60	H. V. Deshmukh . . .	1915	Talegaon . . .	Vardha . . .
61	D. M. Nalk . . .	1915	Brahmangaon . . .	Kopergion . . .

*Loni, showing their full address, with the passing year—concl.*

District.	Post Office.	REMARKS.
Poona . . .	Fursungi . . .	Passed last April. No information.
" . . .	Loni . . .	Working on his farm.
Nasik . . .	Yevla . . .	Ditto.
" . . .	Nagarsul . . .	Ditto.
Satara . . .	Ashte . . .	Seeking for service.
Sholapur . . .	Vairag . . .	Now works on his farm but is after service.
" . . .	" . . .	No information.
Belgaum . . .	Murgod . . .	Has taken up agricultural work.
Vardha, C. P. . .	Talegaon . . .	No information.
Ahmednagar . . .	.....	Working on his farms.

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